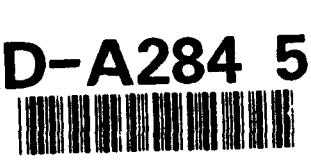

FLIGHT INCENTIVE PAY FOR ARMY AVIATORS

A thesis presented to the Faculty of the U.S. Army Command and General Staff College in partial fulfillment of the requirements for the degree

MASTER OF MILITARY ART AND SCIENCE

by

CAPTAIN DANNY G. I. PUMMILL
B.S., Northern Michigan University, 1983

Fort Leavenworth, Kansas
1994

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Flight Incentive Pay for Army Aviators

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The U.S. Army is paying incentives under the Aviation Career Incentive Act (ACIA) (to attract and retain qualified aviators) that are no longer justified. The research was designed to determine the Army's need to pay aviators ACIA in order to attract and maintain qualified aviators. The Aviation Career Incentive Pay Program was designed and implemented to prevent highly skilled personnel from leaving the military to take higher paying jobs in the civilian aviation sector. Air Force and Navy pilots make up the primary source of pilots for the civilian aviation sector and are in direct completion for trained aviators. Army pilots who are predominantly trained on helicopters are not heavily recruited by the civilian aviation sector as there is no significant market for helicopter pilots outside of the military. The results of this study indicate that the Army has been paying Aviation Career Incentive Pay to officer and warrant officer aviators for reasons other than those set down in the Act. Most Army aviators surveyed feel they are entitled to the pay, because of their special training and skills. At the time this study was completed there is no established shortage of qualified personnel applying for Army flight school. Additionally, the Army has not experienced any problems retaining qualified aviators.

ACIA, Aviation Career Improvement Act, Flight Pay
Army Aviators, Helicopter Pilots, Incentive Pay

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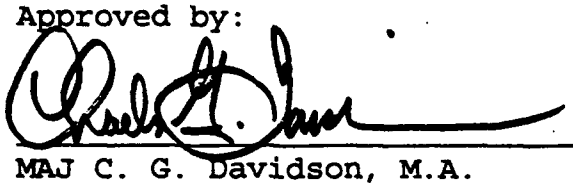

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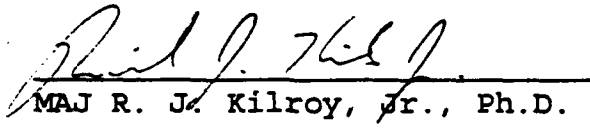

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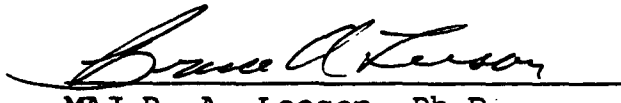

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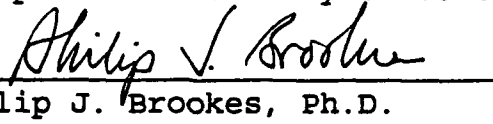

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement).

ABSTRACT

FLIGHT INCENTIVE PAY FOR ARMY AVIATORS, by Captain Danny G. I. Pummill, AG, USA, 120 pages.

The U.S. Army is paying incentives under the Aviation Career Incentive Act (ACIA) (to attract and retain qualified aviators) that are no longer justified. The research was designed to determine the Army's need to pay aviators ACIA in order to attract and maintain qualified aviators.

The Aviation Career Incentive Pay Program was designed and implemented to prevent highly skilled personnel from leaving the military to take higher paying jobs in the civilian aviation sector. Air Force and Navy pilots make up the primary source of pilots for the civilian aviation sector and are in direct competition for trained aviators. Army pilots who are predominantly trained on helicopters are not heavily recruited by the civilian aviation sector as there is no significant market for helicopter pilots outside of the military.

The results of this study indicate that the Army has been paying Aviation Career Incentive Pay to officer and warrant officer aviators for reasons other than those set down in the Act. Most Army aviators surveyed feel they are entitled to the pay, because of their special training and skills. At the time this study was completed there is no established shortage of qualified personnel applying for Army flight school. Additionally, the Army has not experienced any problems retaining qualified aviators.

ACKNOWLEDGMENTS

This thesis could not have been completed without the assistance of a number of individuals. I was fortunate to have Sam Torry as my next door neighbor. Sam was assigned to aviation branch, Total Army Personnel Agency in Washington, D.C., prior to this assignment and dedicated a lot of time explaining terms and helping me. While he did not completely agree with my thesis, Jeff Kappenman from Staff Group 9D, was always willing to provide me background information on the various aspects of Army Aviation. He spent a lot of personal time reading my work and making recommendations. Jack Gundrum, an Air Force B-52 pilot assigned to my staff group, provided information from an Air Force perspective. He also served as my proofreader and spent a lot of his free time assisting with the completion of this study. I would also like to thank Karin Brightwell, the secretary in the Graduate Degree Programs Office, for typing and technical support. Finally, I would like to thank my wife Paula and my three children Jason, Jamie, and Danny, for their support and patience with my absence during the past year. Without the assistance of these people, I would have been unable to complete the requirements for my Master of Military Art and Science Degree.

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CHAPTER 1

INTRODUCTION

> Our need to attract fliers is inextricably related to our need to keep them. And the more we retain, the fewer we need to train. That is just common sense. Now, the retention of flyers is what we are talking about. In our case it is less expensive to retain a flyer than to incur this replacement training cost.[1]

> The Army agrees with the conclusions of the major civilian pay commissions since World War II, that compensation for exposure to hazard is not a valid basis for pay differential. The aviation career incentive pay system must be geared to the supply and demand experience to provide the necessary motivation and encouragement for individuals to enter and remain in aviation on a voluntary basis.[2]

These two simple statements made during the 1974 full Armed Services Committee consideration of House Resolution 12670, Aviation Career Incentive Act of 1974, along with other testimony had a profound and far-reaching effect on the Armed Forces of the United States. The outcome of these hearings was the passage of the Aviation Career Incentive Act (ACIA), which directly linked the payment of aviation incentives, or what most aviators refer to as flight pay, to the ability of a military service to attract and retain qualified aviators. This law requires

the military services to provide annual updates to Congress on their ability to attract and retain qualified aviators to military service. The law was enacted at the request of the armed services to stem the flow of qualified aviators from the military to the civilian aviation sector.

All military services in the United States offer aviation incentive pay to qualified officer and warrant officer pilots. Some of the services have (in addition to the aviation incentive pay) instituted a form of bonuses in a further attempt to ensure qualified aviators remain on active duty.

This paper will examine the Army's ability to attract and maintain qualified officer and warrant officer aviators. This thesis will also attempt to determine if the Aviation Career Incentive Act has had an impact on the enlistment and retention of aviators.

The Problem

The United States Army is currently paying aviation incentive pay to officer and warrant officers performing both flight and nonflight related duties. The Army, consistent with the other services, provides this incentive pay in compliance with the provisions of Public Law 93-294, The Aviation Career Incentive Act (ACIA) of 1974. This act amended Section 301 of Title 37, United States Code,

relating to incentive pay to attract and retain qualified volunteers for aviation duties.[3]

There is currently no demand for rotary wing (helicopter) pilots in the civilian aviation field.[4] Ninety-five percent of all Army pilots are trained and qualified for rotary wing aircraft only.[5] Initial statistics and information made available from the Department of the Army Personnel Command indicate that there is no demonstrated shortage of qualified personnel applying for aviation duty nor is there a record of too many aviators leaving active Army service voluntarily. Aviation incentive pay is paid to aviators based upon years of flying duty. Most Army aviators continue to receive aviation incentive pay even when they are not actually assigned to aviation duties. All personnel receiving incentive pay are closely monitored by aviation branch at the U.S. Army Personnel Command as they are required to report these statistics to Congress on a regular basis. The basis for this research is to determine whether it is necessary for the Army to continue to budget for and expend funds in the aviation incentive pays program for officers and warrant officers.

The Air Force and the Navy are extremely concerned about the aviation incentive pay program and spend a tremendous amount of time and resources justifying the program to Congress annually. These services attempt to

predict potential aviator losses to the civilian aviation sector and closely monitor the hiring trends and salary structure of the civilian aviation industry. Both services produce annual reports, which attempt to predict future trends in civilian aviation which will directly impact on their ability to attract and retain qualified pilots. Most of the available research indicates that the Air Force and the Navy feel that the program must be constantly monitored and compared against prevailing retention rates, or they will risk a critical shortfall of pilots.

At this time, the Army does not monitor the civilian aviation industry and tracks pilots in the same manner which all other officers and warrant officers in the Army are tracked. No attempt is made to relate the Aviation Incentive Pay to trends in the civilian marketplace.

If there is no need for an aviation incentive pay to attract and retain qualified Army aviators, then the Army is possibly failing to periodically review the program, as required of all Army incentive programs. This appears to be a case where the Army is expending scarce financial resources in less than a prudent manner on an unnecessary program.

Direction of Research

There is no substantial research existing on the subject of aviation incentive pay from the Army aviation

community. An intensive search of existing documents has shown that there is very little research which correlates the ability of the Army to retain pilots to the incentive pay program. This search included documents from military publications and scholarly work at the various military schools. The last quantitative research on the subject is dated 1969, at the height of the Vietnam War, when there was in fact an Army aviator shortage.[6] This thesis is the first research written to show there is no potential for losing Army officer and warrant officer pilots to the civilian aviation industry. There is no recorded evidence that the Army has ever conducted a study in this area. As shown in Chapter 4 of this paper, there is not a substantial market for rotor-wing aviators or non-jet qualified aviators in the civilian sector. At this time, the Army does not train jet qualified fixed wing aviators.

The Army monitors the updates and information gathered by the Air Force and the Navy, but has not commissioned a similar study, nor become involved in presenting data which relates aviator losses from the Army to civilian sector positions. The Army seems content with maintaining the current program and ensuring that its aviators receive pay increases through the Aviation Incentive Pay Program commensurate with those received by the Navy and the Air Force.

This thesis will take a detailed look at the Army's aviation incentive pay program. Through analysis of available material and statistics, coupled with surveys and interviews, I will attempt to determine the current status of the program. This research will review the aviation incentive pay program as it applies to Army officer and warrant officer pilots and attempt to determine if the program is still required based on the elimination of the Soviet Union as a major threat to the United States and the subsequent congressionally mandated draw down of military forces.

Problems Associated with the Research

During the initial research for this thesis, a large amount of information relating to incentive pay for aviators in the Air Force and Navy was located and analyzed. Several Masters theses, along with many research and leadership papers on this subject are produced annually by the Air War College, and the Naval Post Graduate School. The U.S. Army maintains a substantial number of aviator positions. In comparison to the other services, there are currently 12,645 officer/warrant officer receiving flight incentive pay in the Army, 9,605 in the Navy, and 24,905 in the Air Force.[7] The number of pilots required by the Army indicates the necessity for contemporary research in this area. These figures do not include all personnel receiving aviation

incentive pay, but only reflect actual flight positions. The actual number of personnel receiving incentive pay is substantially higher. Considering the above statistics it was surprising to find only one paper relating to Army aviators and flight incentive pay since 1969.

The lack of current data and scholarly research is coupled by extremely limited information in books and periodicals. There is substantial information available for the Navy and the Air Force, but none on the Army aspects of the program. As a direct result, most of the data provided in this paper is derived from original source documents taken from Army statistics, interviews, and surveys. In some cases, it was possible to relate the research available from Navy and Air Force sources, however, due to the differences in aviation type duties, this avenue of research was limited.

Thesis Question

The primary research question of this thesis is whether or not the Army's Aviation Incentive Pay Program is necessary to attract and retain qualified officer/warrant officer pilots in army aviation positions, as required by law. This primary question suggests several subordinate questions that will be addressed.

1. Does aviation incentive pay have a significant impact upon the retention of qualified officer/warrant officer pilots?

2. Is flight incentive pay necessary in order for the United States Army to attract sufficient qualified personnel into flight and related training programs?

3. How does the retention and recruitment rate of qualified officer/warrant officer pilots compare to warrant officer/officer rates in fields which are not authorized aviation incentive pay?

4. Do all pilots, in all military services receive ACIA at the same rate, and for the same reason?

These questions are designed to fully analyze the initial thesis question. They were answered in order to ensure that all conclusions discussed in this thesis are fully supportable.

Assumptions

The major assumptions used in this thesis are:

1. The Army has not reevaluated its reasons for continuing aviation incentive pay, as it relates to the retention and recruitment of officer/warrant officer pilots.

2. Recruitment and retention trends for Army officer and warrant officer pilots are projected to remain the same in the relatively near future.

3. The United States Army will continue to require helicopter pilots to be in the grade of officer and warrant officer.

4. Aviation incentive pay will continue to be paid to pilots in all three services without any major changes in the program, unless the program is reevaluated.

5. Pilots will resist in any attempt to decrease or eliminate ACIA.

Limitations of Thesis

The limitations of this study are primarily in the area of defining the terms of the Aviation Incentive Pay Act, and how the Army complies with that act when paying benefits under the program. This thesis will deal solely with the aviation incentive pay program as it relates to recruitment and retention of officer/warrant officer pilots in the Army. This thesis will not consider hazardous duty or safety as consideration for continuing the incentive pay program. Safety will be briefly discussed in Chapter 3 in order to provide a historical background for the aviation incentive pay program. The aviation incentive pay act is binding upon all services. As such, this thesis will not attempt to separate the Army program from the rest of the services. All military pilots receive ACIA, at the same rate, based upon Congressionally mandated law.[8]

This thesis will not examine the social and psychological aspects of the Aviation Incentive Pay Act on officer/warrant officer pilots. It will also not attempt to predict the financial impact that continuing or discontinuing the incentive pay program would have on Army pilots. As Army officers/warrant officers in other career fields do not receive aviation incentive pay, this thesis will not consider the payment as essential to the financial well being of officer/warrant officer pilots.

Significance of This Research

At the time of this writing, the Army is going through a dramatic reduction in the size of the active duty and reserve forces. In addition, various programs are being evaluated and eliminated on a cost benefit basis. These cuts and reductions are being accomplished in order to meet new Congressionally mandated budget constraints.

This trend is projected to continue well into the foreseeable future, and is causing the Army to closely examine all programs. In order to maintain those programs absolutely essential to the completion of the Army's mission (as dictated by current national security strategy), it is essential that the Army carefully analyze all programs and accounts. The Army's Personnel Pay and Benefits Account is one of its largest single budget items, and contains the aviation specialty pay program.[9] The Army must maintain an

acceptable force level, and ensure that weapons programs, and personnel programs are adequate to complete its mission and provide a decent quality of life for its soldiers. In the near future, the Army will be forced to make tough decisions in the area of personnel pay and benefits. These decisions cannot be made without a critical and detailed examination of all existing programs to ensure that they are meeting their stated goals and objectives.

The demand for a Cold War dividend coupled with a decreasing defense budget has resulted in Congress and the American people requiring that all government agencies substantiate all areas of their budgets. While the Army is being forced to undergo downsizing in many of its programs, there still exists a need to increase expenditures in certain areas. A good example where an increase in funds may be required in the near future is overall recruitment of personnel.

> The Army recruiting command, for the first time in many years was unable to fill the enlisted quota with its goal of high school graduates. According to recruiting statistics, this trend will continue as changing attitudes and demographics impact upon the recruitable population. The Army may be forced to return to an enlistment bonus of some type in order to attract qualified applicants in sufficient numbers to man the force. This requires an increase in the personnel and pay account. The requirement to recruit qualified soldiers is extremely critical to the Army. We have entered into an era where highly qualified and technical

soldiers are required in the majority of the Army's career fields.[10]

This example was specifically mentioned because it is a competing part within the personnel and pay account. The aviation incentive pay program and the Army enlistment bonus program exist for the same reason: to attract and retain qualified personnel into specific career fields within the Army. Recruitment is just one area where the Army may need to place additional funding if it is to remain a quality force.

Organization of Thesis

Chapter 1 is the introduction, it provides the direction of the research, limitations, and creates the rationale for conducting this study.

Chapter 2 reviews literature which was used in the research. This chapter also discusses methods of obtaining statistics and information which are not available in published literature.

Chapter 3 provides a review of the historical background behind the creation of aviation incentive pay. In this chapter, the Career Aviation Incentive Act of 1974 is discussed in detail.

Chapter 4 contains a detailed discussion of the methodology used to prepare this thesis. Additionally, this

chapter lays out the rationale for surveys and interviews conducted in the research.

Chapter 5 details the analytical application of all the research to the thesis question. This chapter examines all the statistics and provides an analysis and evaluation of the data as it pertains to the thesis question.

Chapter 6 provides my conclusion based upon the findings of research obtained during the course of this thesis.

Chapter 7 makes recommendations for further research in the area of aviation incentive pay for officer/ warrant officers in the Army. Chapter 7 also contains several recommendations for changes in the aviation incentive pay program as it currently exists.

Endnotes

[1]Congress, Senate, Armed Services Committee, Aviation Career Incentive Act of 1974, 93rd Congress, 2nd Session, 31 May 1974, 93.

[2]Ibid., 198.

[3]Aviation Incentive Act of 1974, Public Law 93-294, Volume 88, Section 177, 200(1974).

[4]Nationwide Job Data Base. Federal and Civilian Job Opportunities, Code 19263038, (Helicopter Pilots). Washington, D.C.: March 1994.

[5]Department of the Army. Aviation Training Report; Pilots; Trained in Fiscal Year 1992, (Washington, DC: Government Printing Office, 1993), 9.

[6]Willard C. Goodwin, Jr., "A Study of the Army Aviator Retention Problem." (Master of Military Art and Science Thesis, United States Army Command and General Staff College, Fort Leavenworth, Kansas, 1969), 6.

[7]U.S. Department of Defense. Manpower Requirements, Report 1993, (Washington, DC: Government Printing Office, 1993), Table III.

[8]U.S. Department of Defense, Department of Defense Pay Manual, Part Two, Manual of Pay and Entitlements. Washington, D.C.: Office of the Secretary of Defense, U.S. Government Printing Office, 1993.

[9]U.S. Department of Defense, Military Manpower Costs by Component, (Washington, DC: Government Printing Office, 1993), Table VIII.

[10]W.A. Woods, "Analysis of Enlistment Incentives for High Quality Recruits to the United States Army." (Master's Thesis, United States Naval Post Graduate School, Monterey, California, 1992), 2.

CHAPTER 2

LITERATURE REVIEW

Introduction

The publications and information used in this research are divided into four major sub-groupings: (1) previous research, (2) military documents and publications, (3) literature, and (4) other non-military government sources. Some of these sources thoroughly cover the various aspects of Army aviation, while others provide only background information. Specific comments were provided only on those sources which were used extensively in compiling the information for this study. All other sources used to provide information, insight, and data for this research are listed in the bibliography. There was little previous research on payment of aviation incentive pay to Army pilots available in the Combined Arms Research Library (CARL), U.S. Army Command and General Staff College, Fort Leavenworth, Kansas. Most of the available research, information and data support peripheral issues, but do not directly deal with the subject of Army Aviation Incentive Pay.

Previous Research

A thesis entitled, A Study of the Army Aviation Retention Problem, by LTC Willard C. Goodwin, Jr., dated 1969 is the only known research in this area. Although this research paper is over 25 years old, it provided valuable insight into the area of aviation incentive pay. Of particular interest were the surveys which the author conducted among Army aviators, and high school students in 1969.

This paper was written at the height of the Vietnam War, consequently some of the information no longer applies. When this paper was written, the Army was building its aviation assets at a tremendous rate. Because of this acceleration and the attitude of the American people toward both the military and the Vietnam War, it was extremely difficult to get people to volunteer for anything, let alone aviation. The draft enabled the Army to get sufficient soldiers for combat, but aviation was and still remains a voluntary effort. Pilots in this era mirrored the rest of the Army in attitude, and retention statistics.[1]

LTC Goodwin's research deals with the pilots (both officer and warrant officer) who flew for the Army during the Vietnam era. Their attitudes and opinions reflected the prevailing norm at the time. The survey which LTC Goodwin conducted of Army pilots received responses to questions

such as Why did you become a pilot? (which mirror those of current Air Force and Navy research).

LTC Goodwin found that pay was not a significant factor in the attraction and retention of Army pilots.[2] The major factors which caused pilots to leave the Army were dissatisfaction with the military way of life, lack of benefits for both military members and their dependents, different treatment for officer pilots versus warrant officer pilots, and their overall attitude concerning military service.

Two years after LTC Goodwin completed his study, the retention rate for Army pilots substantially increased and has remained high ever since.[3] Since LTC Goodwin's data, for the most part no longer applies, this thesis provides updated information in this area.

The reasons Army officers fly and their motivation to remain in the Army appears to have remained basically the same. What makes this current research so valuable is that the survey population which LTC Goodwin considers to be valuable to his research, was also utilized in this research. A comparison of LTC Goodwin's survey is utilized to contrast Chapter 5 of this thesis. This paper provides valuable information and was the only paper located which dealt specifically with Army officer and warrant officer aviators.

As previously stated, there are numerous scholarly papers available on the subject of aviation incentive pay for Air Force, and Navy officers. One paper in particular, Pilot Retention an Historical Analysis, by LTC John D. Rhoades, 7 April 1990, at the Air University was extremely helpful. LTC Rhoades an Air Force officer, conducted a comprehensive study into the problem of attracting and retaining Air Force pilots. He utilized Air Force statistics and surveys to analyze why pilots leave active duty and how to keep them in the Air Force.

His major conclusion was, that as long as the civilian aviation sector offers better pay, hours, and benefits, the Air Force will have a pilot retention problem. Specifically, his research equates the loss rate of Air Force pilots directly to the hiring trends of civilian aviation. There is a direct relationship between the two. LTC Rhoades concludes that pay, particularly ACIP has little impact upon Air Force pilot retention. He states that quality of life, benefits, and the ability to continue flying are the key factors which impact upon a pilot's decision to leave active duty.

LTC Rhoades' research deals directly with jet qualified fixed-wing pilots, as they are the primary target for civilian aviation. He indicates there is no substantial market for helicopter pilots outside the military at this time.

LTC Rhoades' overall thesis is that the civilian aviation market drives the loss rate for military pilots. All of these papers indicate that competition from the civilian aviation industry is the cause of pilot retention problems in the Navy and the Air Force. These papers also indicate that there has never been a shortage of qualified volunteers for pilot training, nor are any anticipated in the near future. LTC Rhoades' original research is substantial and enhanced in a research report entitled, Alternate Solutions to the Problem of Pilot Retention in the United States Air Force, by LTC Victor D. Jaroch, and LTC Mark A. Williams at the Air University in 1990. This study details the reasons pilots leave active duty and places pay low on the list of motivational factors.

Military Documents and Publications

Military documents and reports provided the bulk of information which went into the development of this thesis. The Army Aviation Personnel Plan for Officers and Warrant Officers, published by the United States Aviation Center at Fort Rucker, Alabama, provided information on officer and warrant officer aviator career paths. This manual provided personnel considerations for officers and warrant officer aviators and provides references to Army and Department of Defense regulations pertaining to aviation incentive pay. The manual explained how aviator officers and warrant

officers are selected and assigned. A more complete analysis of Army pilot career paths is provided in Chapter 5 of this paper.

Other military documents and publications which contributed significantly to this research are as follows:

1. Department of Defense Pay Manual, 1993 Edition. Outlines the rules surrounding ACIP for Army officers and warrant officers. These rules are outlined in detail in Chapter 3 of this thesis.

2. Department of the Army Military Manpower Training Report FY1993, provides the training cost and school quotas for Army aviators. It also provided a discussion of the importance of maintaining certain numbers of qualified aviators on active duty, that states the importance of maintaining a proper balance between the training cycle and the need for new pilots.

3. Two Department of the Army regulations provides information on the requirements necessary to apply for and serve as Army aviators. Army Regulation 614-200, Selection of Enlisted for Training Assignments, provide information on obtaining warrant officers for flight positions. Army Regulation 614-100, Officer Assignment Policies, provides information on obtaining officers for flight positions. Both of these documents were used extensively to provide detailed information throughout this thesis regarding the ACIP Program.

Many other military documents and publications were used to obtain specific knowledge in the area of ACIP. (A complete listing of these documents is provided in the bibliography).

Government Documents

The ACIA is a U.S. Government program which applies to all military pilots. As such, U.S. Government documents pertaining to ACIA were essential to the conduct of this research

The primary U.S. Government document used was the U.S. Congress House Committee on Armed Services, Hearings on H.P. 8593, (1989) relating to Incentive Pay, to Attract and Retain Volunteers for Aviation Duties. This document provided invaluable insight into how the ACIP was developed, and the Congress's planned purpose for the ACIA. Of particular interest was the testimony of the representatives from the military services on the basis for and need to maintain an incentive pay program for aviators.

It would not be possible to conduct research into the aviation incentive pay program without examining the law which makes it binding upon the services. The U.S. Congress House Aviation Career Incentive Act of 1974, (entitled House Resolution 12670) is the actual law which provides the basis for this program.

Other Sources

Periodicals, newspapers, and magazine articles were used to update information on helicopter pilot positions in the civilian aviation sector. These articles were used to provide background information on the training of helicopter pilots and the impact of downsizing the Army on Army pilots.

The lack of documented information on the viability of the Army Aviation Incentive Pay Program, forced a search for other sources of information relating to the program, such as interviews with personnel who were actively involved in the management of the Army's Aviation Incentive Pay Program. The challenge was ensuring that the data obtained were analyzed thoroughly in order for it to be used as a basis for further research. Based upon this research and available information, there is a need for further inquiries in this area. Suggestions are offered for further research in Chapter 7.

Endnotes

[1]Willard C. Goodwin, Jr. A Study of the Army Aviation Retention Problem. MMAS Thesis, Fort Leavenworth, Kansas: U.S. Army Command and General Staff College, 1969.

[2]Ibid, 64.

[3]Department of Defense. Military Manpower Training Report (Trends). Office of the Secretary of Defense for Force Management and Personnel, Washington, D.C.: U.S. Government Printing Office, October 1993, VII-7.

CHAPTER 3

HISTORICAL INFORMATION AND BACKGROUND

Introduction

In order to gain an insight into the current status of the Army's Aviation Incentive Pay Program and its compliance with the ACIA, a look at the history and background of the program is necessary.

The term "flight pay" first came about in World War I. Aviators of all branches of the military refer to aviation career incentive pay as flight pay. (For purposes of this paper the term flight pay is synonymous with the term Aviation Incentive Pay). Flight pay began in its most basic form was instituted in 1913.

> Congress authorized the payment of an aviation incentive pay for the purpose of compensating personnel engaged in high risk or hazardous military activities which flight entailed.[1]

When the above statement was made, flight was a relatively new field and was considered extremely life threatening and therefore a dangerous occupation. By the middle 1900's, flight became safer as new types of aircraft and procedures were developed.[2]

In 1949, the Hook Commission decided that hazardous duty was no longer a key element of flight pay and changed the law to make flight pay as an incentive to attract and retain qualified aviators.[3] The Hook Commission, however, left the term hazardous duty in the law, even though the Congressional hearings at the time showed that it was recognized that the real purpose was to attract and retain qualified aviators. Upon examining the records of the hearings closely, I can only concur that the hazardous duty provision was left in the law to appease several Congressmen.[4] These committee members had served in the Army Air Corps during World War I and seemingly could not comprehend that flight had become safer. There was much arguing between committee members as to the hazards of flight. Many who had served as pilots in the military had some very strong feelings about the danger that pilots face, and would not be convinced by statistics that it was now safer.

In order to appease those members of the committee who did not want the term hazardous duty taken out of the law, the Hook Commission substituted the following wording:

> An incentive to attract qualified volunteers into an aviation career, which is recognized as being more hazardous than most in peacetime.[5]

Impact of Civilian Aviation Industry

At the time this legislation was being amended, (in late 1949), the fledgling civilian aviation industry was beginning to experience a boom. Almost immediately, the military began losing qualified World War II and Korean War veteran pilots to the civilian aviation industry which offered much greater pay and benefits. Since the early 1950's, the civilian aviation industry has been the largest competitor for military pilots.

> The major economic alternative to military aviation lies in the civilian aviation industry, notably the airlines. The airlines usually do not hire new military pilots over the age of 35, therefore military aviators over age 35 are not competitive for the higher paying airline pilot jobs. But for the young flyer, the airlines are a viable alternative, and in fact over 87% of all airline pilots in the United States are ex-military pilots.[6]

The Air Force and the Navy have always maintained that there is a need to provide compensation to aviation personnel as an incentive to keep young officers on active duty. However, there has never been a documented requirement for Army aviators in the civilian aviation sector. During the 1950's through the 1980's, the Air Force and Navy based their bonus plans and incentive on the actual needs of the civilian aviation industry.

Elimination of Hazardous Duty Provision

During the Korean War and later Vietnam, Congress and the military services quickly realized that aviation was not as hazardous as most other military occupations. In fact, during Vietnam (a war in which helicopters were used extensively), the loss rate for aviation officers and warrant officers was less than that of ground officers. On an average, the rate of loss for aviators was 19 aviators killed per 1,000 deployed as compared to a loss rate of 65 ground officers per 1,000 deployed. In the worst year of the war, 1969, the loss rate was 29 aviators killed per 1,000 deployed, and 69 ground officers killed per 1,000 deployed.[7] (The term ground officer applies to all non-flying officers except for medical officers).

During Congressional hearings in 1974 Congress questioned the Army's payment of ACIA as a hazord or dangerous activity pay. The Army admitted that it was not fair to be paying aviators for hazardous duty while not paying ground officers who were facing greater danger, (as indicated in casualty records from Vietnam).[8] It should be noted that in combat all soldiers receive hazardous duty pay entitled eminent danger pay, whether they fly or not. However, aviation officers and warrant officers were receiving both this pay and flight pay for hazardous duty. This double requirement was based upon the law which required the Army to pay everyone in the theater combat

hazard pay. Air Force, aviators face a greater danger than the average airman because unlike the Army, the only war fighters in the Air Force are the pilots and flight crew members. In the Navy, sailors and submariners face a risk equal to pilots, however they do in fact receive special incentive pay for these activities.

Dual Proficiency

In the early 1970's, the Army justified a portion of its aviation incentive pay programs on the fact that Army officer aviators were expected to maintain two proficiencies. At that time, all Army pilots maintained a basic branch skill such as Infantry or Artillery officer, and were also expected to remain fully flight qualified. These officers rotated between flying and non-flying positions, and were expected to be proficient in each in order to remain competative for advancement. At that time, most officers who remained too long in flying positions were hindered from promotion at the same rate as their peers.

In April, 1984, the Army did away with this program and made the aviation field a separate career branch of the Army. This allowed aviators to advance in the aviation field and not rotate to positions other than those required by all officers. All Army officers, including aviators, were still subject to nominative assignments such as aide-de-camp, recruiting duty, reserve duty, etc.

In 1989, the ACIP Improvement Act was passed by Congress and made applicable to all the services This act basically increased the amount of incentive pay, and set standards that had to be met during the first 12 years of aviation duty. These rules are explained fully in the next section of this thesis.

Flight Pay Rules

Today, Army officers and warrant officers receive aviation incentive pay at rates between $125 and $650 a month. Most Army aviators will receive approximately $130,000 in Aviation Incentive Pay over a 20 year career, and $230,000 over a 25 year career.[9] Table 1 shows the rate for aviation incentive pay for Army officers and warrant officers as of 1 January 1994.

TABLE 1

MONTHLY INCENTIVE PAY RATES (EFFECTIVE 29 NOVEMBER 91)
RATED OFFICERS AND WARRANT OFFICERS AS OF JANUARY 1 1994

Monthly Rate	Years of Aviation Service
$125.00	2 or less
$156.00	Over 2
$188.00	Over 3
$206.00	Over 4
$650.00	Over 6

Note: Data for this table compiled from the U.S. Department of Defense Pay Manual, 1 January 1994.

These incentive payments are made to Army aviators whether they fly or not, for the first 12 years of their aviation career. An officer who holds an aeronautical rating is entitled to continuous aviation career incentive pay for the first 12 years of his or her military service without regard to monthly performance requirements. In other words, all pilots who are medically qualified for flight related duties receive their full entitlement no matter what duties they are assigned.

Upon completion of 12 years of aviation service an officer must have performed 6 or more years of operational flying to be eligible to receive continuous entitlement until the 18th year of military service. Upon completion of 18 years of aviation service the officer must have performed at least 9 years of operational flying to be eligible to receive continuous entitlement until their 22nd year of military service. Upon 25 years of total federal officer service (TOFS), all officers are automatically terminated from flight pay, unless they are actually engaged in piloting an aircraft as part of their assigned duties. Warrant officers receive flight pay until they retire.

If an officer is not assigned to an operational flight position he or she can still meet the requirements for continuous flight pay after 12 years. This is accomplished by completing a prescribed minimum number of flying hours each month. These officers are entitled to

flight pay only while in an operational flying position. So if an officer fails to meet his required gates during his or her first 6 years, he or she can continue to receive ACIP whenever they are assigned to actual flying duties. Consequently, they are required to fly a minimum of four hours per calendar month. If they do not fly four hours in a month, excess hours flown during the preceding five months, (which have not been used to qualify for incentive pay), may be applied to meet this four hour requirement. For fractions of a calendar month, the aviator on conditional status, (an aviator who has not met all required gates), must fly the appropriate percentage (i.e., 18 days = 2.4 hours).[10] The vast majority of officer and warrant officer aviators in the Army meet these requirements and receive the aviation incentive pay.

Once an officer goes over 18 years TOFS, the rate at which he or she receive aviation incentive pay changes. Warrant officers continue to receive flight pay throughout their career. The rate goes down every two years until the soldier has reached 25 years of service as a commissioned officer. Actual incentive pay rates for officers in excess of 18 years of TOFS are shown in Table 2. Warrant Officers continue to receive flight pay at the rate of $650 per month, until they retire.

TABLE 2

MONTHLY INCENTIVE PAY RATES
FOR RATED OFFICERS OVER 18 YEARS
AS OF 1 JANUARY 1993

Monthly Rate	Years of Service As An Officer
$585.00	Over 10
$495.00	Over 20
$385.00	Over 22
$250.00	Over 25

NOTES:

1. A rated officer who is a Brigadier General may not receive more than $200.00 a month regardless of TOFS.

2. A rated officer who is a Major General or above may not receive more than $206.00 a month regardless of TOFS.

3. Officers with more than 18 years TOFS and less than 6 years of aviation service are entitled to the monthly rates shown in Table 1.

4. Data compiled from U.S. Department of Defense Manual, 1 January 1994.

At this time there are no enlisted soldiers serving as pilots in the Army. All enlisted applicants are designated a temporary warrant officer one (WO1) at the time they begin flight training. Both officers and warrant officers begin to receive aviation incentive pay immediately upon entering flight school.

The Army only pays pilots incentive pay for certain specialties, called career fields. If an Army officer or

warrant officer changes career fields to a field which is not authorized the aviation incentive pay, he or she would become ineligible for the incentive pay. (For example, if an officer pilot were to transfer to the Finance Corps, he or she would no longer receive flight pay). In the same manner officers and warrant officers who are otherwise disqualified from aviation duty are ineligible for payments under the program. Officers and warrant officers can become disqualified for medical, security, or proficiency reasons. In order to ensure that the loss of aviation incentive pay does not cause an undue financial hardship on pilots, their flight pay is continued for a period of 180 days. On the 181st day of disqualification the officer or warrant officer looses his or her flight incentive pay. This provision also allows personnel who are temporarily disqualified to regain qualification without loss of pay.

Most aviators go to great lengths to ensure that they remain fully qualified for aviation duties, even though they may not be assigned to an aviation unit or billet. A key point in the area of medical disqualification is that the standards to enter into flight training are much more stringent than those required to remain in a flight status. A good example is the pilot who requires glasses after flying for several years, can still fly with the use of glasses, while an individual applying to flight school must have perfect vision. This is done to ensure that highly

qualified personnel which cost the Army a lot of money to train do not become disqualified for flight for relatively minor circumstances. The career fields which are authorized aviation incentive pay as of January 1993 are shown in Table 3.

TABLE 3

OFFICER AND WARRANT OFFICER SPECIALTIES
AUTHORIZED AVIATION INCENTIVE PAY
AS OF JANUARY 1992[3]

OFFICER

Speciality	Designation
15A	General Aviation
15B	Combat Aviation
15C	Combat Support Aviation
15M	Combat Intelligence Aviation
15S	Air Traffic Controller
15T	Aviation Logistics
67J	Aeromedical Evacuation Aviation

WARRANT OFFICER

Speciality	Designation
15200	Rotary Wing Attack
15300	Rotary Wing Utility Observation
15400	Rotary Wing Cargo
15500	Fixed Wing Utility
15600	Fixed Wing Observer

NOTE: Although the Army trains fixed wing aviators, it does not train or otherwise qualify personnel on jet fixed wings. Data for Table 3 was compiled from Army Regulation 611-101, 31 May 1992, and Army Regulation 611-201, 31 May 1993.

Today the Army still pays aviation incentive pay to officer/warrant officer pilots on the basis of retention and recruitment. Several times during the history of aviation incentive pay, Congress has attempted to end this program or modify it as a tremendous amount of money is spent in this area. In the early 70's, the Army, along with the other military services was going through downsizing after the Vietnam War. These cuts were attempted in order to reduce spending in the Aviation Career Incentive Program and to transfer the money to the various services recruiting and retention programs. For example: The Army has continually experienced a shortage in many key military specialties, particularly in the communications area). When the Army switched from a draft force to an All Volunteer Force in 1973, many recruitment initiatives were initially to ensure the success of all the All-Volunteer Army.

At the time this paper was being prepared, the military services paid 705 million dollars in FY92, in incentive pays to active duty personnel.[11] Congress has directed all of the military services to cut spending across the board, including the specialty pay accounts. This has been directed as part of the ongoing reduction in defense spending. As shown in Table 4, all the services reduced spending in the incentive pay area in Fiscal Year 92 relative to Fiscal Year 91. These reductions, which are scheduled to continue through fiscal year 98, will be based

upon Congressionally mandated cuts. Despite these reductions the Army still paid 133 million dollars in aviation incentive pays in Fiscal Year 92. This is a reduction of only 1 percent within the incentive pay arena. If this trend continues, the Army will reduce incentive pay commensurate with overall reductions in the Army pay accounts, in order to ensure that all critical programs are retained at acceptable levels.

TABLE 4

MILITARY MANPOWER COSTS
BY COMPONENT
(in millions)

Military Personnel Appropriation	Army	Navy	Marine Corps	Air Force	DoD Total
FY91 Total Obligations	27,535	20,01	6,375	20,021	74,940
FY92 Total Obligations	24,861	9,673	6,084	18,949	69,566
Change	2,674	337	291	1,072	5,374
Percent Change	.9	.98	.95	.94	.92
FY91 Incentive Pay	142	265	38	301	746
FY92 Incentive Pay	133	261	36	275	705
Change	9	4	2	26	41
Percent Change	.93	.98	.94	.91	.94

Note: Army took smallest cut in overall personnel appropriations however in the incentive pay the Air Force took the smallest cut. The Air Force while cutting their overall personnel account, left most of their incentive pay programs in tact. Data compiled from Department of Defense, Military Manpower Cost by Component, 1 June 1993.

All of the military services have conducted studies and compiled statistics that show incentive pays have little effect on the retention of qualified aviators. Both the Navy and the Air Force consistently maintain a retention problem.[12] As of this writing the Army has not experienced a problem in the retention of qualified aviators. All the military services continue to pay aviation incentive pay in equal amounts, as prescribed by the Aviation Career Incentive Act of 1974. All Army aviators continue to receive this pay based upon the figures shown in Table 1, whether they are actually engaged in flight duties or not.

Endnotes

[1]Congress, Senate, Armed Services Committee, Aviation Career Incentive Act of 1974, 93rd Congress, 2nd Session, 31 May 1974, 213.

[2]Ibid., 227.

[3]Ibid., 205.

[4]Ibid., 13-27.

[5]Ibid., 13.

[6]Ibid., 217.

[7]Ibid., 199.

[8]U.S. Department of Defense, Department of Defense Pay Manual, Part Two, Manual of Pay and Entitlements. Washington, DC: Office of the Secretary of Defense, U.S. Government Printing Office, 1993.

[9]Ibid., 39.

[10]Ed Owen, "Flight Pay, Gates, and Wings," A Study Project. U.S. Army Command and General Staff College, Fort Leavenworth, Kansas, 2.

[11]U.S. Department of Defense, Department of Defense Military Manpower Costs by Component. (Washington, DC: Office of the Secretary of Defense, U.S. Government Printing Office, 1993), Table VIII.

[12]Daniel F. Crum. Air Force Pilot Retention: A Look at 1996. A Study Project, Carlislt Barracks, PA: U.S. Army War College, 7 April 1990, 4.

CHAPTER 4

RESEARCH METHODOLOGY

Introduction

In order to examine the thesis question, this study utilized the following approach: (1) Determine the requirements for entry into the Army's officer and warrant officer pilot programs and examine statistics and trends for the Army's pilot accession program; (2) Examine the retention of Army pilots and determine the availability of pilots both officer and warrant officer in the Army, as compared to actual Army requirements; (3) Analyze the planned downsizing of the Army, its impact upon the Army pilot program; (4) Look at the availability of pilot related positions in the civilian sector for Army pilots, and determine their impact upon Army flight; (5) Research previous studies on aviation flight pay, and examine the factors which impact directly upon military aviation; (6) Conduct a survey of ex-Army aviators to examine the effect ACIA has had upon their decision to leave the Army, if any; and (7) Develop recommendations and conclusions based upon the information and findings made as a result of this research.

Attract and Retain Qualified Pilots

The ACIA was implemented for two basic reasons: (1) to ensure adequate numbers of qualified personnel are available to train as pilots; and (2) to ensure that qualified pilots remain on active duty in numbers sufficient for the military services to conduct their day-to-day missions, and handle any contingencies that may occur.[1] This portion of the study utilizes available military and government statistics to examine both of the above provisions of the ACIA.

Military Manpower Reports and Statistics which are published semiannually by the Department of Defense were utilized to obtain most of this information. These reports provided numbers of pilots by service assessed each year for fiscal years 9FY) 1991, 1992, and 1993.[2] It also provided the total number of pilots on active duty for the same period of time. In order for this information to be of any use it had to be compared against statistics showing the number of personnel applying for pilot positions, and the loss rates of pilots compared against other military specialties. This information was obtained from several primary sources: (1) the Army Strength Report, a quarterly report of officers and warrant officer losses by specific job or category; and (2) information provided by the Army Accessions Branch, and the Army Aviation Branch, provided statistics on the number of personnel applying for Army

pilot positions from the active duty officer and warrant officer ranks. The United States Army Recruiting Command, and Enlisted Distribution Branch, and Army Accessions, provided statistics on the number of personnel not on active duty requesting pilot positions in the Army.

Once all of the above statistical information was obtained it was analyzed to provide a comparison of the retention rates for pilots compared against the rest of the Army, and the number of personnel requesting pilot training as compared to other Army specialties.[3] The statistics were also compared against those published by the Air Force and the Navy to determine if trends remained the same across the services.

In order to provide background information on this portion of the study, interviews were conducted with Army officers and warrant officers accession personnel, Army recruiters, and personnel working at officer and enlisted distribution branch in the Department of the Army. This portion of the study provided the thought process behind the accession and retention programs for personnel in the Army. It also helped to analyze trends and figures revealed during the gathering of information.

Planned Army Downsizing

The final portion of this area of the study was to examine information concerning the downsizing of the Army.

An analysis conducted by the Congressional Budget Office (CBO), entitled Reductions to the Army Officer Corps, and interviews with personnel at the Fort Leavenworth Army Transition Office were the primary source of information. This part of the study is important in that it provides information pertaining to career fields which Congress and the Army felt would be exempted from manpower cuts during the current downsizing of the Army. It needed to be determined if similar to the Air Force, and the Navy, the Army protected pilots from these cuts. The Army's aviation career field was compared against the rest of the Army's career fields in researching this portion of the study. In addition, information provided by the Army aviation branch, and the Army's officer distribution branch were used to obtain information provided by officers and warrant officers leaving the service under the provisions of these programs.

Availability of Pilot Positions in Civilian Aviation

All previous research and information available on pilot retention lists the availability of high paying jobs in the civilian aviation sector as the primary reason for pilots leaving active duty. Additionally, congressional records of the implementation of ACIA state this as the primary reason for the initiation of the Act in the first place.

This area of the study was conducted through the use of government and private sector information of job opportunities in the civilian sector. The United States Department of Labor's Occupation Outlook Handbook, and Occupational Projections and Training Data were the primary government sources for this portion of the study. They were analyzed to obtain current and projected availability of positions for helicopter pilots in the civilian sector. Primary civilian documents for this data were the Professional Job Finder, and Money's Jobs in America. These documents were utilized to collaborate the government data and to determine what the business sectors appraisal of the helicopter pilot situation was.

Upon completing the analysis of available data, national agencies specializing in finding positions for helicopter pilots were contacted to obtain specific up-to-date information on the status us jobs for ex-Army pilots, (helicopter). Career Pilot Services, of the Future Aviation Professionals of America, National Pilot Placement Service, and American Helicopter Society International, were the primary sources for this information. These sources provided data and background on the availability of positions for helicopter pilots outside of the military. They provided specific information on the ability of even the most skilled helicopter pilot obtaining employment, and

information of the rates of pay and benefits being offered at various civilian organizations.

Examination of Statistics

The information used to complete this portion of the study was obtained from Navy, Air Force, Marine, and Coast Guard reports and studies. As stated in Chapter 1 of this study, no Army papers dealing with retention of Army pilots could be found.

The documents and reports available in this area were examined and correlated to Army pilot data and statistics. While many documents were used to complete research in this area, the essential data was obtained from four primary documents: (1) Factors Affecting Career Retention Among Naval Aviators, a Naval study; (2) Collateral Duty Job Satisfaction Among Coast Guard Aviators, a Coast Guard Study; (3) Aviator Retention in the Marine Corps, a Marine study; and, (4) An Analysis of Air Force Initiatives to Improve Pilot Retention, an Air Force study. These primary documents along with others were analyzed to determine the impact that ACIA had on the retention of pilots in these other services. In particular the impact of ACIA on helicopter pilots was examined.

This portion of the study takes a detailed look at the impact of ACIA has had on retention and accessions of pilots in military services. It lists the factors which

cause pilots to leave active duty, and discusses what can be done to remedy these factors through use of ACIA. This portion of the study also determines if the factors which cause pilots to leave the other military services also apply to Army pilots.

Why Aviators Leave Active Duty

In order to determine the exact causes that impact upon a pilots decision to leave active military service, this study examines data from a comprehensive study commissioned by the Air Force, entitled, Alternate Solutions to the Problem of Pilot Retention in the United States Air Force. Key areas in this portion of the study deal with the factors that cause a pilot to leave active duty and the importance of each of those factors. In particular this area of the research was tied back to the ACIA to determine whether it was able to override these factors. Critical to the completion of this study was to determine if the factors which cause Air Force and Navy pilots to leave active duty would be applicable to Army pilots.

Pilot retention in the Navy and the Air Force is at a crisis state and is a major concern, so both services extensively researched the status of pilot retention and its causes and affects.[5] Much of this research can be directly linked to Army aviators, as can the reasons which trigger the final decision to leave active duty.

Ex-Army Aviator Study

The relative lack of information on the subject of Army aviators and ACIA necessitated some type of Army research to verify and expand upon data derived from other sources. In order to fill in this gap, a survey was conducted of a group of ex-Army aviators.

This survey is of a group of officers and warrant officers who used to be on active duty. The information will be used to build upon the statistical and historical research addressed earlier in this chapter. The questions utilized in the survey will provide background on the respondents and examine the impact that ACIA had upon the respondent's decision to leave active duty.

The sample utilized in this survey was of a group of officer and warrant officer aviators who recently participated in an exercise within the Central American countries of Belize, Guatemala, and Honduras. These aviators were assigned to a unit identified as Task Force Jaguar.

The Task Force was formed in October 1991, and was disbanded in August 1993. The Task Force was headquartered out of Fort Sam Houston, Texas and was made up of a cadre of 107 fulltime personnel.[6] Fifteen of these fulltime personnel were Army Reserve, and Army National Guard helicopter pilots. In addition to the fulltime cadre, the Task Force rotated over 5,000 additional personnel, Reserve,

and National Guard in two week intervals, throughout the deployment of the Task Force. This additional group of personnel included 93 officer/warrant officer helicopter pilots. The vast majority of these personnel came from an Aviation Group stationed in Texas, the remainder came from 8 different state Reserve and Guard units.[7] A total of 108 officer and warrant officer pilots participated in this Task Force.

A copy of the Task Force personnel data base was used to sort the aviation officers by paragraph and line number. The survey was provided to every third individual on the data base. A total of 39 surveys were sent out as part of this study. A unique situation occurred in which 41 surveys were returned. The Task Force Adjutant stated that several pilots requested to complete a survey, so he made extra copies for them.

Formulation of the Survey

Personnel who are currently in the civilian work force but who previously were Army pilots on Active Duty make up the vast majority of Army Reserve and Army National Guard pilots. In an attempt to solicit information from ex-Army pilots, the target personnel were Reserve aviators currently serving in the Army Reserve.

The survey consisted of 39 questions concerning general military interests; future career plans, what

motivated these individuals to enter the Army Aviation Programs and their opinions and attitudes concerning the impact ACIP had upon their decision to leave the active Army. The survey also attempted to ascertain how many of these ex-Army pilots left the Army for civilian pilot opportunities, and assess the availability of jobs as perceived by these pilots. The survey by its nature was responded to by a group of ex-Army pilots who were willing to come on active duty for an extended period of time as they had all volunteered to become affiliated with a deployable unit.

This survey is important to the research in that it analyzes a group of Army officers and warrant officer aviators who received benefits under the ACIA on active duty, but are no longer on active duty. This analysis provided sociological insight into whether the ACIA is working in the Army. A copy of the survey and results are located at Appendix C of this study. An analysis of the survey results is provided in Chapter 5.

Develop Conclusions and Recommendations

All of the above listed data and informational sources will be analyzed and conclusions determined in Chapter 5 of this study. Recommendations for the Army's use of the ACIA will be included as part of the Conclusion.

These recommendations will be outlined and discussed in detail as they relate to the research questions. Once all factors and information are identified and discussed the final analysis will determine if the ACIA is serving its designated purpose in the Army. Recommendations for future research are included at part of Chapter 7.

Endnotes

[1]Congress, House, Committee on Armed Services. Hearings on H.R. 0593, Relating to Incentive Pay, to Attract and Retain Volunteers for Aviation Duties. 93rd Congress, 1st Session, May 1974, 200.

[2]Department of Defense. Army Strength Reports. Washington, DC: U.S. Government Printing Office, July 1993.

[3]Paul Westmeyer, A Guide for Use in Planning and Conducting Research Projects. Springfield, IL: Charles C. Thomas Publishing, 1981, 35.

[4]Department of the Air Force. Air Force Issues Book. Washington, DC: U.S. Government Printing Office, May 1989, 5-10.

[5]Department of the Army. Modified Table of Equipment, Joint Task Force JAGUAR (Provisional) 1992. Washington, DC: U.S. Government Printing Office, June 1992.

[6]Department of the Army. Personnel Distribution Tables, Joint Task Force JAGUAR (Provisional) 1992. Washington, DC: U.S. Government Printing Office, June 1992, 7.

CHAPTER 5

ANALYSIS

Introduction

The research methodology for this study was designed to determine whether the Aviation Center Incentive Pay for Army pilots is still required. Historical data and U.S. Army statistics were the primary source for most of the information utilized in this chapter. As ACIP is paid to recruit and retain qualified aviators, this chapter will deal primarily with those aspects of the Army pilot training program, and specifically with helicopter pilots. Currently 99 percent of all Army pilots, both officer and warrant officer are helicopter pilots.[1] The Army does train a limited number of fixed wing pilots, however, none of these are jet qualified. These fixed wing pilots are trained at Air Force Schools

The U.S. Army and its sister services, are the world's largest trainers of pilots, for both helicopters and fixed wing aircraft.

TABLE 5

U.S. Military Helicopter Pilot Training

Component	FY90	FY91	FY92	FY93
Army	948	760	647	647
Navy	515	317	317	328
Marines	251	260	268	267
Air Force	18	29	0	0
Total	1,732	1,366	1,232	1,242
Total Pilots				

Data compiled from Military Manpower Training Report FY1993 prepared by Office of the Assistant Secretary of Defense (Force Management and Personnel).

NOTE: Of the total Army pilots shown above 19 percent are commissioned officer candidates, and 81 percent are warrant officer candidates.

NOTE: Number of pilots trained is initial flight training only, advanced training is not included.

Army flight training programs provide basic pilot skills required prior to an operational assignment as a pilot. As shown in Table 5 above, the Army trains a large number of helicopter pilots each year. The vast majority of these pilots are warrant officers. Enlisted entrants undergo warrant officer candidate training before entering any flight phases of training.[2] In order to obtain the required number of pilots, the Army selects volunteers from its officer, warrant officer, and enlisted ranks.[3] The majority of potential Army pilots come from the enlisted ranks. Qualifications for entry into the Army Flight

Program are such that most people who qualify to enter the Army can qualify for flight training. At the time this paper was written, the requirements for entry into the Army Flight Program were as follows:

TABLE 6

REQUIREMENTS FOR FLIGHT TRAINING
ARMY OFFICERS

1. Be an active or resource component lieutenant, captain, or be in training for a commission (OCS, ROTC, USMA).

2. Have less than 48 months Active Federal Commissioned Service (AFCS) at the start of the flight training.

3. Score a minimum of 90 on the Flight Aptitude Selection Test (FAST).

4. Be medically qualified for flight duties: pass a class 1A flight physical and meet Army height and weight requirements.

5. Be older than 18 but younger than 30 at the start of flight training.

6. Meet the educational requirements of the commissioning process the officer went through (OCS, ROTC, Military Academy, Direct Commission).

Information from Department of the Army Regulation 611-10, dated 6 March 1986.

NOTE: Most Army officers have a 4 year college degree, prior to entering the Army.

As indicated in Tables 6 and 7, the qualifications necessary to become an Army pilot are not strenuous. In fact, to become a warrant officer pilot, which comprise the majority of Army pilots are, a high school degree is the highest level of education required. According to Army statistics, the FAST test minimum passing score of 90 is attained by 70 percent of the personnel who take the exam.[4] The number one factor which eliminates potential applicants is failure to pass the class 1A flight physical with perfect 20/20 vision.[5] Perfect vision is only required for acceptance into initial flight training. The applicant must have 20/20 vision without glasses or other aids. Once an individual successfully completes initial flight training, the uncorrected requirement can be waived if an individual's vision degrades. The standard changes to 20/20 vision with corrected lens, (glasses). According to the Aviation Board at Fort Rucker, Alabama, the 20/20 requirement is merely a screening tool that allows them to pare down the large pool of potential applicants. It would be too expensive to eliminate a fully trained operational pilot simply because he or she wears glasses.

TABLE 7

REQUIREMENTS FOR FLIGHT TRAINING ARMY WARRANT OFFICERS

1. Be a U.S. citizen.

2. Be older than 18 but younger than 30 at the start of flight training.

3. Meet the Army height and weight requirements.

4. Have a high school degree or equivalent.

5. Be willing to enlist in the Army for a period of 2 years.

6. Be willing to incur a 3 year obligation upon successful completion of flight training.

7. Score at least a 90 on the Flight Aptitude Selection Test (FAST).

8. Be medically qualified for flight duties: pass a class 1A flight physical.

9. Pass a personal interview conducted by a qualified Army pilot.

Information compiled from Department of the Army Regulation 601-108, dated January 1993.

NOTE: After meeting qualifications, enlisted applicants must successfully graduate from Army Basic and Advanced Soldier Training prior to attending flight school.

According to Army recruiting personnel, the qualifications for Army flight training are such that there are substantially more qualified personnel applying for flight training, than there are positions. At this time,

there are substantially more applicants for both officer and warrant officer flight school than there are positions. There are so many applicants for flight training that the Army temporarily suspended its advertising for the high school to flight school program.

> This is a program for potential Army soldiers wherein high school graduates can apply to become warrant officer pilots in the Army. A high school student is given the required tests, medical exam, and interview, if he or she successfully passes, they can be entered into the program provided there are vacancies. This program leads directly to a commission as an Army warrant officer pilot upon graduation from flight school.[6]

When the Army was advertising this program on national television, it substantially increased inquiries by potential applicants. Recruiters in the Kansas City area say that the program allowed them to enlist many high quality individuals who would have otherwise not considered the Army. Due to the number of qualified applicants applying for Army flight training, the Army is able to select the best qualified personnel. Air Force, Navy, and Army pilot statistics indicate that there has never been a shortage of qualified personnel applying for pilot positions. This includes all pilot training to include helicopter training. All three services routinely turn away a large number of applicants. As the Army's flight positions are filled predominantly by warrant officers whose entry requirements are lower than that of officers, they

consequently have a much larger pool of applicants. The Army is the only U.S. military service which uses warrant officer pilots.

Recent demographic studies of the U.S. population indicate that all military services will begin to suffer a shortage of male personnel in the next ten years.[7] This is a direct result of the declining population of males between the ages of 18 and 24 in the United States. Pilot recruiting personnel say that this will have no impact upon the number of personnel applying for pilot positions. In fact, as women become eligible to fill more and more flight positions, the number of qualified personnel applying for flight duty is expected to increase significantly. According to the Army Personnel Command, all three services have recently opened up many pilot positions to females and are expected to eliminate most remaining female pilot restrictions over the next few years. When females become eligible to fly most types of helicopters it will provide Army recruiters a pool of eligible pilots which should double the size of the current pool. This is based upon the fact that females make up 62 percent of the U.S. population (as of January 1994), and assumes that females will be eligible for flight training in the same ratio that males currently are.[8]

As indicated earlier in this chapter, the number one factor making personnel ineligible for flight training is

the eye exam on the class 1A flight physical. Optometrists in America are currently predicting that a simplified procedure to permanently correct eye sight may soon render corrective eye wear for Americans obsolete.[9] If this occurs, it substantially increases the amount of personnel qualified for flight training.

The screening process described in Tables 6 and 7 is extremely effective in ensuring that qualified personnel are selected for Army flight training. The attrition rate for Army personnel currently stands at 2 percent for officers and 4 percent for warrant officers. The attrition rate for warrant officers is higher because warrant officers attend school for 53 weeks versus 47 weeks for officers.[10] The extra 6 weeks is a warrant officer candidate school which applicants must successfully attend prior to actually attending flight school. All Army warrant officer candidates including non-pilots must attend this course. The attrition rate at this 6 week course is 3 percent. Despite the fact that warrant officer pilots have lower entry qualifications than officer pilots, they have a lower attrition rate when attending the identical 47 week pilot training course. This fact indicates that there is no relationship between level of education or special skills and aptitude for helicopter flight, as the educational requirements for warrant officer pilots are substantially lower than those for officer pilots. (See Tables 6 and 7).

The statistics show that the flight applicants with the least prerequisites do better in flight training. According to aviation personnel, this is largely because of the personal interviews that warrant officers are required to undergo. This interview conducted by a experienced helicopter pilot, tends to ensure that the applicant has the skills and motivation to fly: something that a written test may miss.[11]

Retention of Qualified Aviators

It is important for the Army to retain sufficient pilots on active duty to accomplish its wartime mission. The Army's Aviation School at Fort Rucker, Alabama, states three primary reasons for retaining aviators:

1. Maintain highly trained personnel whose skills are highly perishable.

2. The high cost of training an Army pilot.

3. The Army's dependence upon aviation in combat.

The Army's retention rate for officer and warrant officer pilots has surpassed all other Army officer and warrant officer specialists since 1967.[12] Most pilots in the Air Force, Army, and Navy leave active service because they no longer fly aircraft.[13] Army warrant officers only fly, so they never experience this problem and subsequently have an extremely high retention rate. The Air Force and Navy are both experimenting with a fly only career pattern

for pilots, modeled after the Army warrant officer pilot career pattern.[14] Army warrant officer pilots simply do not leave active duty in any significant numbers. At the end of FY92 the Army had 6,652 officers and 4,878 officers holding aviation specialties.[15] During FY93 the Army had to downsize its aviation ranks as there were more commissioned pilots than there were available pilot positions. The number of pilots and pilot positions eliminated during FY93 are as indicated in Table 8 below:

As indicated in Table 8, the U.S. Army reduced its commissioned officer population of pilots by 781 from FY92 to FY93. The Army aviation branch is closely monitoring the number of pilots as they downsize the Army pilot strength through FY96. Current Army pilot strength is in excess status to include 47 excess officer pilots and 98 excess warrant officer pilots. (Based upon FY93 Congressionally mandated authorizations).

The management challenge in the employment of Army pilots is not the retention of pilots on active duty, but rather the lack of pilot positions for officer pilots as they move up in rank. The majority of operational flying

TABLE 8

COMMISSIONED OFFICERS
AVIATION BRANCH

Rank	FY93	FY92	Difference
LTG	1	0	+1
MG	5	5	0
BG	8	7	+1
COL	198	246	-48
LTC	690	905	-215
MAJ	958	1,140	-182
CPT	1,160	1,355	-175
LT	858	1,001	-143
Total	3,878	4,659	-781

Data compiled from Regular Army Strength Report July 1993, and July 1992.

NOTE: Changes in upper 3 grades is a result of promotions and does not reflect a change in the number of positions.

positions for officer pilots is at the company grade level, (lieuten-ants and captains).[16] The opportunity for operational flying is significantly reduced for field grade aviators, (majors and above). The number of operational flying positions as compared to the officer pilot population at the end of Fiscal Year 93 is as indicated in Table 9.

As indicated in Table 9, the Army's problem is not retention of officer pilots, but is the population of excess pilots at the field grade level. The Army unit and rank structure is such that as a pilot goes up in rank, his or

TABLE 9

COMMISSIONED OFFICER INVENTORY VERSUS FLIGHT POSITIONS
FISCAL YEAR 93

	Operational Flight Slots	Officers on Hand	Difference
Company Grade	2,053	2,018	35 (short)
Field Grade	899	1,860	961 (excess)
Total	2,852	3,878	926 (excess)

her opportunities to pilot aircraft became fewer and fewer. This is not a problem unique to the Army. The Army does not experience a decrease in warrant officer positions because all warrant officer pilots can fill any warrant officer position. Army warrant officer pilot positions remain the same regardless of rank. Combine decreasing officer positions with a large number of warrant officer pilots which continue to pilot aircraft as they increase in rank and you have a unique relationship between pilot rank and flight skills. The Army has an officer pilot corps which becomes less and less practiced and perhaps less qualified as they move up in rank due to decreasing opportunities to fly. Conversely its warrant officer pilot corps becomes better qualified and more experienced as they move up in rank. The Army ends up with less experienced pilots being paid more than experienced pilots, (based upon rank), and in many cases, the less qualified pilot being placed in charge of units of highly qualified pilots. Army officer personnel

branch states this is not a problem as the qualities that make a good commander extend past flying aircraft and involve good leadership and managerial skills.

The Air Force and the Navy do not experience this dilemma, for two reasons: (1) they do not employ warrant officer pilots; and (2) they lose a substantial number of pilots to the civilian aviation industry immediately upon a pilot completing his or her initial obligated tour of duty. Neither the Air Force or the Navy experience any major shortages of helicopter pilots.

To further exacerbate this situation, the Army Aviation Branch has had to plan for cuts in personnel to match the mandated downsizing of the Army. Over the next several years, the Department of Defense will undergo a major reduction in military personnel. A substantial number of commissioned officers and warrant officers in the Army will be included in this downsizing effort. Many of these cuts will have to be accomplished involuntarily. The Army will be required to complete the following reductions between now and Fiscal Year 96: (1) reduce officer accessions by 3,810 a year, (56 of these will be pilots); (2) increase early releases by 1,010, (23 of these will be pilots); and (3) increase involuntary separations by 800 and early retirements by 470, (83 of th will be pilots).[17]

The Congressional Budget Off. (CBO) has directed the Army to induce more junior officers to accept early

releases to include pilots. The CBO study conducted in April 1992 recommended that the Army encourage pilots, excluding Apache and Blackhawk qualified personnel, to accept the early release packages to the greatest extent possible. The overall cuts mandated to the Army Aviation Corps are 3 percent in 1993, 5 percent in 1994, and about 8 percent in 1995.[18] These percentages of reductions are consistent with the proposed defense spending cuts that have been put forth by Congress in recent months. The Army is currently planning to reduce its helicopter fleet from 8,000 to 4,600, over the next 3 fiscal years. The 4,600 number is based upon a force structure of 4 corps and 12 divisions.[19] This reduction was recommended by the U.S. Army Aviation Restructure Initiative (ARI) in April 1993. Since this review, the CBO has taken the administration's recommendation to downsize the Army to 10 divisions, indirectly resulting in a proportional decrease of the helicopters supporting these divisions. Army estimates put the 1996 Army helicopter fleet at approximately 3,900 helicopters. Current Army projections for helicopter pilots will leave over 9,000 helicopter pilots on active duty at the end of Fiscal Year 96 with only 3,900 helicopters in the inventory. Note, pilot positions are not equal to the number of helicopters. This projection for pilots is based upon the current pilot population of 6,000 warrant officers, and 3,878 officer pilots on active duty at the end of Fiscal

Year 93, (See Table 8). Projected losses and reduced accessions through 1996 were subtracted from this number.

The retention of commissioned officer pilots does not assist the Army in its goal to maintain highly qualified pilots. This requirement is more closely met through the warrant officer pilot program. There is no retention problem for either officer or warrant officer pilots. As the Army continues to downsize, the problem will be how to get pilots to resign from the Army, not how to retain them on active duty. An ideal solution to a problem of excess pilots would be to eliminate or reduce ACIP for helicopter pilots. All Army pilots incur a mandatory 6 year service obligation upon completion of flight school. Flying positions for officers are reduced dramatically after the six year point. There is absolutely no need to offer pilots other incentives to remain on active duty.

Civilian Alternatives for Pilots

While retention of Army pilots has never been a problem, the Air Force and Navy retention of pilots with 6 to 11 years of service is at a historic low.[20] The apparent cause for these low rates is directly attributed to an increase in the demand for commercial pilots. The Air Force and the Navy have always competed with civilian aviation to keep pilots, and this is their primary reason for aviation incentive pay and pilot bonuses.[21] As long as the civilian

aviation industry offers attractive packages and pay scales, the services will continue to lose pilots. The military cannot compete with the working hours, pay scale, and benefits offered by the civilian aviation industry.[22]

Commercial airlines in the United States expect over 20,000 pilots to resign in the next 10 years, and they expect to hire 6,000 pilots per year through the 1990s.[23] Upon contacting the various commercial carriers and utilizing the Army's Employer Network Database located at the Army Career and Alumni Center, it was determined that none of these positions were open to helicopter pilots. This database checked 150 pilot hiring organizations across the United States, and is accurate as of 1 February 1994.[24] A large portion of these new positions will be a direct result of the aging commercial pilot population.

The reason for the loss of military pilots to the civilian sector, is primarily the high wages offered by the major airlines. The Air Force cannot complete with these wages even when the ACIP and a 12,000 flight bonus is added to military pay. As helicopter pilots are not recruited for these high paying positions, the Army does not have to contend with high exit rates for pilots. The civilian aviation sector has never actively recruited Army pilots. In a 1968 study it was proposed that a $3,500 a year bonus be offered to helicopter pilots to prevent any possible

future recruiting which might occur from commercial airlines. This recruiting never occurred.

A search of organizations offering employment to helicopter pilots was conducted as part of this research. The U.S. Department of Labor, Bureau of Statistics publishes a yearly Occupational Outlook Handbook. In the 1992-1993 edition, the only place that there are positions projected to be available for helicopter pilots is in the military. The handbook shows great potential for helicopter mechanics and technicians, as they can either work on civilian helicopters or be retained for fixed wing aircraft. The civilian potential for helicopter pilots is rated as extremely low. The Occupational Projections and Training Data Handbook published by the same organization indicates that the current lack of civilian helicopter pilot positions will continue through the year 2005.

The impending shortage of fixed-wing pilots and mechanics has prompted corporate aviation departments to overhaul their salary structures and personnel policies to attract and retain qualified people.[25] This overhaul is being done in an effort to attract more Air Force and Navy pilots. At the same time, organizations which employ helicopter pilots are able to hire new pilots at rates which are substantially lower than the pay offered to Army officer and warrant officer pilots on active duty. The civilian aviation industry will not pay high wages to helicopter

pilots because the supply of pilots greatly exceeds the demand. Helicopter Annual, published by Helicopter Association International of Alexandria, Virginia, indicates that there are approximately 300 to 500 applicants for every helicopter position available. This compares to only 1 pilot available for every 3 fixed wing (Jet) positions. A sample listing of available pilot positions available in the United States in the last quarter of 1993 is shown in Table 10 below.

As shown in Table 10, there are relatively few helicopter pilot positions available in the United States. The Army Employer Network Database, lists 160 organizations that utilize helicopter pilots. In a review of these organizations, only 1 was actively seeking a helicopter pilot. That organization was Air Evacuation Emergencies Inc., out of West Plains, MS. Upon contacting them, it was determined that they currently have over 100 applicants on file, and are looking for an experienced medical evacuation pilot with at least 5 years of experience and a minimum of 2,500 hours flight time. Most of the applicants on file had between 3,00 and 5,000 hours flight time. Most of the applicants on file meet these criteria. Information compiled from Professional's Job Finder, by Daniel Lauber, Published by Planning Communication, River Forest, Illinois, 1993.

TABLE 10

PILOT VACANCIES IN THE UNITED STATES
FALL 1993

Source	Fixed Wing (Jet) Pilots Required	Helicopter Pilots Required
Aviation Employment Monthly	23	0
Professional Pilot	10	0
Private Pilot	10	0
Pilot Job Reports	17	1
Flying	17	1
U.S. Aviator	5	0
Air Progress	6	0
Business & Commercial Aviator Magazine	7 to 21	0
Aviation Week	6	0
Rotary and Wing	3 to 5	1
Airport Report Express	10	0
Total	114 to 130	3

The Federal and civilian job opportunities database, the Nationwide Database, and the Interstate Job Bank version 2.000E, all indicate 0 helicopter pilot vacancies for the period January-February 1994. (This information is as of 4 March 1994). Mr. Robin Crouse, Manager/Counselor at the

Fort Leavenworth Job Assistance Center, stated that while these databases do not always show every position available, they are usually highly accurate for high-tech positions such as pilots.[26]

The only potential for Army helicopter pilots to break into the civilian aviation sector lies in two areas:

First, the high number of future vacancies in the civilian aviation industry is such that many pilots are obtaining positions through self-schooling. These pilots obtain a commercial fixed-wing rating at their own expense. They then obtain additional ratings by working at small airports and businesses until they acquire the hours and experience necessary to apply for high paying commercial positions. Many new pilots are expected to be hired in this manner over the next 10 years, and it offers the opportunity to a helicopter pilot willing to work several years at lower pay and less than ideal working conditions to break into the system. The airlines and large organizations are starting to accept some pilots a little younger and a little less experienced than the airlines normally like.[27]

Second, due to the critical drain on the Air Force and Navy of experienced pilots, these services (in conjunction with the U.S. Senate and the civilian airline industry) are proposing an alternate method of obtaining commercial pilots. They are currently working on an education path which will produce pilots for the civilian

aviation industry.[28] One option is to utilize helicopter pilots leaving the Army as students in this new path. However, in order to become competitive for the high paying commercial airline position it will take a helicopter pilot approximately 4 to 6 years. During this period, he or she will have to become fixed wing qualified and then work at various small airfields until they have acquired the necessary hours and certificates for entry into commercial air. This area is being researched because last year, 69% of the hires at major airlines were ex-military pilots.[29] These pilots were drawn out of the Air Force and Navy by higher wages, shorter hours, and better fringe benefits.

Why Pilots Leave Active Duty

Since there is no high paying alternative for helicopter pilots, most leave the Army for reasons other than pay. The major factors that are identified in Air Force and Navy studies indicate that quality of life is the overriding factor in a pilot's decision to leave active duty. All studies by sister services indicate that until the military looks at how it treats its pilots, and determines a way to keep pilots flying, and out of non-flying positions, their attrition problems will remain. Most pilots state they would stay in the military if they were allowed to continue flying.

All current statistics state that there is no correlation between the amount of ACIP paid to pilots and actual retention rates. The attrition rate for Air Force and Navy pilots has always been directly related to the hiring practices of the civilian flight industry. The Army may in the future face a shortage of pilots, if a program designed to attract helicopter pilots as potential airline pilots is ever initiated. Currently the major airlines do not envision hiring or training helicopter pilots to fill their vacancies.[30]

The Army's only pilot shortage is the number of pilots qualified on specific types of aircraft. This is more a result of training and funding than it is of pilots leaving the active military.[31] The survey results located at Appendix C of this thesis tend to support this conclusion.

The major factor which causes the Navy and Air Force to lose pilots, (civilian aviation industry) has no impact upon the Army; therefore, the uniformed services should not pay all pilots a flat incentive pay. Sound fiscal sense dictates that different circumstances warrant different incentives.

None of the military services in the United States have a problem attracting qualified personnel to volunteer for flight training. All services have more qualified applicants than they have positions.

Survey Information

The results of the survey tend to collaborate the information obtained from the Air Force and Navy studies which were utilized in this study. The pilots surveyed in this research had an average of seven years flying time, and nine years of military service. Most had served on active duty for at least seven years.

Contrary to Navy and Air Force studies, only 5 of the total 41 pilots responding to this survey fly aircraft in their civilian jobs. In Air Force and Navy studies almost 60 percent of ex-active duty pilots are actively engaged in flight related duties in their civilian jobs. It is interesting to note that almost all of the respondents stated that they had applied for a civilian flight position, and would prefer to be flying for a living if given the opportunity.

Most of the respondents thought that there would be ample civilian opportunities to fly helicopters when they attended Army flight school. However, since leaving military service (active duty) they have changed their opinion and realize that there are no positions available. It seems as if there is a basic opinion among Army pilots that they will be able to turn their military skills into high paying flight jobs later in their careers. This erroneous assumption seems to stay with Army pilots until

they actually leave active military service and attempt to obtain civilian flight positions. Many of the active duty Army pilots who provided assistance in this study, also felt that there would be civilian flight positions for them upon completion of their active duty commitment. The majority of the pilots who completed this survey had actually applied for civilian flight positions, but of the 41 pilots, only five, actually had positions which involved civilian flight, or flight related activities.

The motivational factors which cause people to become Army pilots, mirrored that of the factors reported in Air Force and Navy pilot studies. Most people who become pilots state that the number one factor in their decision making process, was the desire to fly aircraft, and the desire to become and officer. The desire to become and officer was the primary factor in the warrant officer respondents. There was no way to relate this to other surveys as none of the other military services utilize warrant officer aviators. This is peculiar to the Army only.

Pilots of all three services state that job satisfaction is highest when they are actually engaged in flight related activities. Surprisingly relatively few pilots responding to this survey felt that pay and benefits were primary reasons for becoming pilots. Once again this area of the study correlates identically to the Air Force

and Navy studies. As this survey deals directly with ex-Army pilots, who are now in the Army Reserve, it was noted that the vast majority of the respondents did not consider flight pay a primary factor in joining the Army Reserve.

Most Army Reserve units have more pilots available than they have positions. A common practice in reserve units is to release reserve pilots to the inactive reserve upon attaining the rank of major. This frees up positions for new pilots in the unit.[32] In the Army Reserve, an individual is allowed to pass up a promotion two times voluntarily. Most pilots in the rank of captain, in the Reserve routinely pass up promotion to major two times so that they can remain in the reserve and fly helicopters as long as possible.[33] Once an individual is placed in the inactive Reserve he or she no longer has the opportunity to train on a monthly basis or fly helicopters. This is the only way that the Reserve can manage the officer pilot positions in each unit. On active duty the Army either releases majors from active duty or moves them to non-flying positions as a method of managing the excess major population. The Reserve manages warrant officers in the same way that they are managed on active duty as there is no rank structure for warrant officers, as they all are directly involved in piloting aircraft. This is a direct result of the diminishing availability of positions for officer pilots as they increase in rank, see Chapter 5.

In similar Air Force and Navy surveys of ex-active duty pilots it was noted that there are ample positions for officer pilots in the Reserve and National Guard. The Air Force in particular allows pilots to continue to fly aircraft as they move up in rank. It is not unusual to see Air Force pilots in the rank of Lieutenant Colonel, and Colonel piloting Air Force aircraft in the Reserve and Guard. Rank is not as important as pilot skills in the Air Force Reserve and Air Guard. In fact, the Air Force and Navy encourage Reserve pilots to remain on active flight status as long as possible. This ensures them an ample supply of qualified aviators in the event of an emergency or a call up.

The reasons which Army pilots leave active duty, they left because they were not flying as much as they wanted to, or for personal and family reasons. The one area where this portion of the survey differs considerable from Navy and Air Force surveys, is that more Army pilots were forced off of active duty due to job performance, failure to be competitive for the next promotion, and in order to down size the Army. Based upon information obtained in this survey relating to Army pilots; this was expected as the Army tends to release pilots involuntarily at numbers which greatly exceed those of all other military services.

The majority of the pilots responding to the survey felt that the only way they could increase their

opportunities for civilian flight related employment was to become qualified on fixed wing, jet aircraft. Many of the respondents stated that they were currently enrolled in civilian pilot courses in hopes of obtaining future employment in the industry.

The majority of the pilots responding were not aware of the exact reason for flight pay. Most Army pilots believed it was for performing hazardous duties, or to compensate them for special skills not held by the majority of soldiers. Of the 41 pilots surveyed, only one was aware that flight pay was being paid on the basis of recruitment and retention.

While not scientific in nature, this survey provided valuable insight into the background and motivational factors which impact upon Army pilots. It also provided some insights into whether Army pilots were motivated by the same factors which motivated pilots of the other military services. This survey reinforced information presented in this analysis and provided a starting point for future surveys of Army pilots.

Endnotes

[1]Department of the Army, Aviation Personnel Records, (Officer/Warrant Officer) (Washington, DC: U.S. Government Printing Office, May 1993).

[2]Department of Defense, Military Manpower Training Report. Office of the Secretary of Defense for Force Management and Personnel (Washington, DC: U.S. Government Printing Office, October 1993), VI-2.

[3]Department of the Army, U.S. Army Recruiting Command Bulletin Fiscal Year 93, (Washington, DC: U.S. Government Printing Office, May 1993).

[4]Department of the Army, Flight Testing Statistics. Fort Rucker, Alabama, U.S. Army Aviation Center, Fall, 1992.

[5]Department of the Army, Army Aviation Personnel Plan. Fort Rucker, Alabama: U.S. Army Aviation Center, Fall, 1992.

[6]SFC Brett Bankston, U.S. Recruiting Command, Interview by author, 12 January 1993, Fort Leavenworth, Kansas.

[7]Department of Defense. Military Manpower Recruiting Results for the Active Components. (Washington, DC: U.S. Government Printing Office, June 1993).

[8]Katherine McIntire. "Women in the Army." Army Times. 18 April 1994, 12-16.

[9]Josh Rosenbaum, "Throw Away Your Glasses, Soon You May Look at the World Through Laser-Sculpted Eyes." American Health, July/August 1992.

[10]Department of Defense, Military Manpower Training Report (Aviation Statistics). Office of the Secretary of Defense for Force Management and Personnel (Washington, DC: U.S. Government Printing Office, October 1993, V-Z).

[11]Major Samuel Torrey, Student, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas. Interview by author, 2 February 1993, Fort Leavenworth, Kansas.

[12]Department of Defense, Military Manpower Training Report (Aviation Statistics). Office of the Secretary of Defense for Force Management and Personnel (Washington, DC: U.S. Government Printing Office, October 1993, V-Z).

[13]Victor D. Jaroch and M. Williams. Alternate Solutions to the Problem of Pilot Retention in the United States Air Force. Research Report, Air University, Maxwell, AL: Air War College, April 1990, 19.

[14]Department of Defense. National Defense Authorization Act for Fiscal Years 1992 and 1993, Report Number 102-311, to Accompany HR 2100, 102:1, November 1993.

[15]Ibid.

[16]Department of Defense, Military Manpower by Component for Fiscal Years 1992 and 1993, Report to Accompany H12 2100; 102: 1, November 1993.

[17]Ibid.

[18]Ibid.

[19]_____ "Army to Lose More Helicopters In Bottom-Up Review." Aviation Week and Space Technology, 21 July 1993, 79.

[20]Daniel F. Crum, Air Force Pilot Retention: A Look at 1996. A study project, Carlisle Barracks, PA: U.S. Army War College, 7 April 1990, 11.

[21]Victor D. Jaroch and M. Williams. Alternate Solutions to the Problem of Pilot Retention in the United States Air Force. Research Report, Air University, Maxwell, AL: Air War College, April 1990, 19.

[22]Ibid., 37.

[23]Nationwide Job Data Base. Civilian Job Opportunities, Code 19263038. Washington, D.C.: March 1994.

[24]Nationwide Job Data Base. Federal and Civilian Job Opportunities, Code 19263038, (Helicopter Pilots). Washington, DC: March 1994.

[25]James T. McKenna. "Flight Departments Offer Higher Salaries to Attract Qualified Pilots." Aviation Week and Space Technology. 1 October 1992, 53.

[26]Robin Crouse, Manager Counselor, Fort Leavenworth Job Assistance Center, Fort Leavenworth, Kansas. Interview by author, 4 March 1994, Fort Leavenworth.

[27]Ibid., 54.

[28]James OH. "Senate Hearings Focus of Growing Pilot Shortages." Aviation Week and Space Technology. August 14, 1990, 28.

[29]M.A. Williams and V. D. Jaroch. Alternate Solutions to The Problem of Pilot Retention. A study project, U.S. Army War College, April 1992, 12.

[30]Adrian A. Paradis, Director, Opportunities in Airline Careers, Interview by Author, Lincon Wood, IL: 4 March 1993.

[31]Department of the Army. Aviation Personnel Branch Records (Pilot Shortfalls). Washington, DC: U.S. Government Printing Office, 1993.

[32]Major Darrel Bright, Senior Aviator, 1/158th Aviation, Texas, Telephone Interview by author, 12 February 1994, Dallas, Texas.

[33]Ibid.

CHAPTER 6

CONCLUSION

Introduction

The conclusion of this thesis is that the Army has not reevaluated its need for aviation incentive pay and that the pay is no longer required to meet its two stated goals.

Flight Pay or Aviation Incentive Pay has been offered to military pilots in some form since 1914. As the aviation industry, and in particular military aviation has advanced and changed the manner in which this pay is managed has also changed. At this time, the military services are paying aviation incentives for two mandated but unjustified reasons: (1) to attract qualified personnel to military aviation service and (2) to retain qualified aviators on active duty.[1] These reasons are stated in U.S. Law and are the basis for all payments under the ACIA Act.

The U.S. Army currently offers a wide range of specialty pay. As well as paying the aviation incentive to aviators; the Army pays a recruitment bonus to bassoon players, (as the Army is critically short of this specialty) and a variety of bonuses for combat, hazardous duties, and medical specialties. All of these programs have one thing

in common, they are set up to rectify a specific problem or compensate a particular type of duty. These programs are continuously monitored and updated to ensure that the needs of the Army are best met. When the Army has all of its bassoon player positions filled, it will end the bonus for bassoon players. When a soldier receives combat pay, that pay ends when the soldier leaves the hostile duty area, or when Congress declares the area is no longer hostile. The Aviation Pay Incentive Pay Program automatically continued even though it is clearly not required to meet stated goals.

Attract and Retain Qualified Aviators

All military studies conducted to date indicate that none of the military services have a problem in attracting qualified personnel into the aviation field. In fact, pilot positions are some of the most sought after in all U.S. military services.[2] As shown in Chapter 5 of this study, the Army has a more than adequate supply of qualified personnel applying for entry into Army Flight School.

Aviation is a field that has always attracted highly qualified youth. It holds a certain mystique and unless there is a dramatic change in motivational factors of the American people, there will never be a shortage of qualified volunteers for pilot positions in the military.[3]

All available statistics and reports published by the military services agree that there is no shortage of

qualified applicants. Where they begin to differ is in the area of pilot retention. Both the Air Force and the Navy are able to produce documented evidence that demonstrates a high loss rate of highly trained fixed wing pilots from the military to the civilian aviation sector.[4] As shown in this study, the Army has not experienced any problems in this area, nor does it expect any changes in current trends for the near future. The continuing lack of positions for helicopter pilots in the civilian sector has always afforded the Army the ability to maintain pilot retention rates which greatly exceed those of the other military services.

It is clear from the information currently available that most pilots do not leave the military for reasons of pay, but for other, more personal reasons. The primary one being the opportunity to pilot aircraft.[5] All of the military services, including the Army, will continue to lose aviators until these issues are addressed and rectified. The Army's big advantage in this area is that even though the factors which cause pilots to leave military service in the Air Force and the Navy, exist in the Army, there is no flying alternative in the civilian sector for Army pilots. In fact, the Army could lose 50 percent of these aviators and still be over strength in pilots.

A pilot in the Air Force or the Navy can leave active duty and be relatively assured of attaining an entry position in the civilian aviation sector. An Army pilot who

is dissatisfied can also leave active duty, but is not assured of any position in the civilian aviation sector. An Army pilot has less than a 1 percent chance of obtaining employment as a civilian helicopter pilot. All of the information obtained in this study indicated that the number one reason that pilots leave active duty is because they cannot do what they love to do, which is to fly aircraft. In personal interviews with Army officer pilots, they all stated that, if they were told they could no longer fly, they would probably look for another job. Even though they know they won't find flight positions in civilian life, they state the hardships of Army life are only worthwhile if they are allowed to fly.[6]

Availability of Qualified Aviators

The six year service obligation incurred by all Army pilots at the completion of flight school, coupled with the Warrant Officer Pilot Program, is more than adequate to ensure that the Army is able to maintain sufficient numbers of qualified aviators on active duty. The Army's most difficult issues are maintaining the correct mix of pilots, and maintaining a large pool of qualified aviators to handle a major crisis situation.[7] Recent history (Vietnam and Desert Storm), has shown that the Army does not have enough qualified aviators in the civilian sector (Reserve officers) who have been maintaining their pilot skills and could be

quickly placed back in the cockpit. This shortage of aviators is not a result of too few pilots, but rather of maintaining the wrong mix of pilots.[8]

The Navy and the Air Force have the luxury of the civilian airlines industry to keep their ex-pilots proficient. This industry coupled with the Air Force, Navy Reserve and National Guard programs allows these services to maintain a large pool of up-to-date qualified aviators. They simply have to bring them back on active duty and upgrade them in the proper aircraft, as their proficiency, medical status, etc., has been taken care of by the civilian aviation industry. The Army's only real source of non-active duty aviators is the Army Reserve, and Army National Guard. These positions are extremely limited and only allow for limited flight experience which in no way can compare with the hours flown by the pilots who fly as a part of their civilian occupation.

While the Reserve and the National Guard have some positions for qualified aviators, most of these positions are required by the units upon activation. Unlike the Air National Guard, Army Reserve and National Guard pilots do not regularly perform active duty related flying. Air Force pilots in the Reserve and Army National Guard actually pilot aircraft for active duty missions as part of their reserve duties. In the event of a major mobilization, the Air Force and Navy can activate air units to assist the active duty,

the Army Reserve and National Guard units normally support the units they are assigned to in their reserve role. Most Army reserve pilots are extremely proficient in their flight abilities, but are only able to pilot aircraft one weekend a month.

This situation is not directly related to the recruitment and retention of qualified aviators. Even under the most favorable circumstances the Army could not afford to maintain a pool of aviators on active duty sufficient to respond to every possible contingency. Since the Army does not have the advantages of the Navy and the Air Force, it must conduct careful risk analysis to determine how many pilots that it can afford to do without. In light of today's fiscally constrained defense budgets the Army is going to have to rely upon its ability to rapidly upgrade its pilot training base to meet the requirements of any large scale contingency.

Should ACIP be Paid to Army Pilots

The Army should not be paying ACIP under the circumstances or at the rates that they are currently paying benefits. The law is quite clear on why this pay is authorized, and the Army does not meet the stated criteria. All information gathered in the conduct of this study indicates that ACIP is being paid based upon the situation and circumstances that are occurring in the Air Force and

Navy pilot programs, thus all pilots are paid at the same rate. As clearly shown in this study the circumstances are not the same in all military services, and the programs should be managed separately, and according to the intent of the law.

Based upon the information available and researched as part of this study, cutting or eliminating aviation incentive pay for Army pilots will not effect Army aviation. Such a change would not cause a decrease in the number of qualified personnel applying for Army flight training. Retention rates would predictably take a slight drop initially as some pilots would leave active duty in protest; however, since most aviators fly because they enjoy it, and the Army Warrant Officer Flight Program offers such a great incentive and pay increase to enlisted soldiers, retention would quickly level out.

This concept was clearly demonstrated when Congress changed the manner in which retirement pay is computed for active duty personnel. When the retirement program was changed to lower the amount of retirement earned at the end of a 20 year military career, many thought that it would wreak havoc with military recruitment and retention efforts. Through the use of the grandfather clause and an ongoing informational program, none of the military services have experienced any shortfalls in either area. It seems as long as personnel currently receiving benefits are not

dramatically impacted when a program is altered, that most personnel simply accept the change. It does not seem to matter to the new soldier, sailor, or airman, probably because they never worked under the old program, so changes do not impact upon them. Retirement is only one example of a program that has been changed through effective use of grandfathering. An analogy can be made between the constant rate of Army enlistments and the many programs which change on a regular basis. To date, the constantly changing education benefits program has not impacted upon either enlistments or reenlistments.

As long as there is no viable civilian alternative at compatible wages for Army pilots, in all likelihood the Army will never suffer a shortage of pilots. Most pilots voluntarily leave the service for monetary reasons. If the Army were to alter the current aviation incentive pay program through the use of grandfathering, it would probably have little impact on the conduct of aviation operations in the Army.

How Much Does the Program Cost the Army

The Army spent 133 million dollars in incentive pay in Fiscal Year 1992.[9] This, while not a large portion of the Army overall budget for manpower, it is an immense sum of money when looked at in terms of manpower. This is enough money to pay the military manpower costs for an

entire active Army division for nine months.[10] As this example indicates, in the current atmosphere of fiscal constraints, there are vital programs that could be funded from the incentive pay program. The Army has continually experienced a critical shortage of aviation mechanics, due to the high pay offered them in the civilian sector. A military bonus could greatly reduce this shortage. Most of those mechanics leave active duty and then take civilian positions with the Army at three to four times their military pay.[11]

It does not make good financial sense to continue to fund a program that is not necessary or required. The money spent in the Aviation Incentive Pay Program alone could be used to fund some critically needed personnel programs throughout the Army, and help to alleviate some of the problems and shortages that currently exist. This is too much money to continue to be paid without the same type of justification and analysis that goes into other Army incentive pay programs.

Army pilots are expensive to train and to keep proficient. The Army requires all of its pilots receiving aviation pay to remain physically qualified for flight related duties. Requirement is tested periodically as part of the program. Most of the reasons that pilots leave active duty including the Army, are not related to pay.

If the Army desires to maintain its Aviation Incentive Pay Program, it must reevaluate how it justifies payment of ACIP. This program might be justified in part through a combination of factors; including but not limited to; cost of aircraft, cost of flight training, need to maintain a pool of qualified aviators, equality with the other services, and motivational factors which cause aviators to remain in flying positions. Justification using the above factors should be directly linked to the amount and method of payment of the aviation incentive pay. The standards should be based upon the same requirements and guidelines which all other Army incentive pay programs are paid and justified.

For some reason the Army aviation community is not supporting its own cause. While there are some, limited articles in Army aviation magazines and periodicals that discuss the need for flight pay they are extremely limited. The Air Force and the Navy aviation branches encourage scholarly, studies of flight pay, motivational factors for aviators, and incentives to keep aviators on active duty and proficient to perform their flight related duties. This is evidenced by the numerous studies and research papers completed each year by Navy and Air Force personnel. During this study, only one Army paper on the subject of aviation incentive pay dated 1967, could be found. Extensive research of all available information published during the

years 1961 and 1993 was included in this research. In this same time period no year went by without several papers and/or studies being completed by the Navy and the Air Force. While it could be argued that this is because there is no problem in the Army aviation arena, this research has determined that there are many areas that have not been adequately researched or documented.

In the completion of this study, many highly skilled and professional Army aviators at all levels were consulted with. Most of these aviators had logical and sound arguments for the continuation of aviation incentive pay for Army pilots which had nothing to do with recruitment or retention, but were areas that merit consideration.

Endnotes

[1]Congress, House, Committee on Armed Services, Hearings on H. R. 0593, Relating to Incentive Pay, to Attract and Retain Volunteers for Aviation Duties. 93rd Congress, 1st Session, May 1974, 200.

[2]Department of Defense, Military Manpower Training Report (Aviation Personnel). Office of the Secretary of Defense for Force Management and Personnel, (Washington, DC: U.S. Government Printing Office, October 1993), III-3.

[3]Note: Based upon historical data taken from all sources utilized in this study. No military service has ever had a shortage of qualified personnel applying for flight training.

[4]K. R. Latour, Pilots in the 1990's, A Concern. Research study, Air War College, Maxwell Air Force Base, Alabama: March 1984.

[5]M. J. Mestemaker, Aviation Career Improvement Act and It's Impact on Retention. Research Study, U.S. Army War College, Carlisle Barracks, PA: April 1992.

[6]V. D. Jaroch, and M. A. Williams, Alternative Solutions to the Problem of Pilot Retention. A Research Project, Air War College, Maxwell Air Force Base, Alabama: June 1989.

[7]Department of the Army, Aviation Personnel Branch Records (Pilot Shortfalls). (Washington, DC: U.S. Government Printing Office, 1993).

[8] Department of the Army, Aviation Personnel Branch Records, (Pilot Shortfalls), (Washington, D.C.: U.S. Government Printing Office, 1993.

[9]Department of Defense, Military Program Costs. Office of the Secretary of Defense for Force Management and

Training, (Washington, DC: U.S. Government Printing Office, October 1993).

[10]Data Compiled from U.S. Army Defense Budget Information for Fiscal Year 1993. Data is an average of typical Army division structures.

[11]Army Employer Network Database. Version 1.132, Army Career and Alumni Services, Fort Leavenworth, Kansas, March 1994.

CHAPTER 7

RECOMMENDATIONS FOR FUTURE RESEARCH

Introduction

This thesis took a look at aviation incentive pay for Army pilots, but is limited by its very scope. There are many questions that came up during this research that should be analyzed and reported upon. Some of the areas that came up during this research are directly associated with aviation incentive pay, while others deal with various aspects of Army aviation. Some areas that should be researched for future projects, are as follows:

1. Should the Army restructure its aviation incentive pay formulas?

If as stated in this study, aviation incentive pay is no longer required to attract and retain qualified pilots, then the Army should examine a complete restructuring of the incentive pay system for pilots. Research into this area should determine if any type of incentive pay for pilots in the Army is warranted. This study should analyze the specific requirements placed upon Army pilots and attempt to directly relate them to an incentive pay if possible. There is a great need for

further research into alternatives to the ACIP, as projected budget cuts will have a direct impact upon Army aviation.

2. Should Army aviators continue to receive aviation incentive pay when they are not assigned to flight related duties?

Research into this area could concentrate upon those officers and warrant officers who receive incentive pay while assigned to non-flight related duties. Currently a large number of Army pilots are not assigned to flying duties. This policy causes the Army to expend a large portion of its aviation incentive pay on personnel who are not actively engaged in flight, and thus defeats the purpose of the program.

3. Is it necessary to have commissioned officers as pilots on Army aircraft?

Currently the Army has both warrant officer and officer pilots assigned to every type of aircraft in the Army inventory. There is an argument that since warrant officers spend more time flying than officers that they make better pilots. Warrant officers are not usually required to be assigned to non-flying duties as part of their career progression. Officers must work in a variety of assignments in order to remain competitive for both promotion and continued service on active duty. A warrant officer pilot can stay in the cockpit for his or her entire career.

Follow-on research in this area should also include whether the Army could utilize enlisted personnel as pilots. There is a lot of information available from both historical sources and the experience of other countries in this area of study.

4. What are the alternatives available to the Army to reduce the effects of pilot retention other than the incentive pay system?

This area of study should closely examine the factors which have the greatest impact upon a pilot's decision to leave the active Army. Most Air Force and Navy studies in this area concentrate upon exit surveys of pilots. These surveys are utilized to develop alternatives to keep pilots on active duty. During the research of this paper, no data of this type was found for Army pilots.

A further area to be examined in this type of research is how the Army is utilizing the Army Reserve and Army National Guard to supplement its aviation program. Research into this area may provide some answers to one of the Army's biggest aviation problems: how to maintain an adequate supply of pilots to be activated in contingency operations.

5. Should the career path for Army pilots be revised?

Information obtained during the conduct of this research suggests that most pilots of all the military

services feel there is a great need for a career path which does not take pilots out of the cockpit. What would be the effect of such a restructuring on overall Army readiness? How would such a program impact upon the retention of junior officers who are currently considering leaving the Army? Would such a program provide the Army more experienced pilots, and would that be at the expense of the non-flying positions currently held by non-flying pilots? Both the Air Force and the Navy are spending a lot of time exploring this option, but the Army has not yet seriously looked at a similar program.

Conclusion

These are just a few of the topics for further research into this subject. Most of these areas would greatly benefit all of the military services, however, the Army in particular has little scholarly research of this type available for study. Further research into these topics could have a major impact upon the future of Army aviation.

APPENDIX A

ARMY PILOT QUESTIONNAIRE

The information obtained from this survey will be utilized in a Master's Degree Thesis, by a student attending the U.S. Army Command and General Staff College at Fort Leavenworth, Kansas. No name or personal identifying information is required on this survey. This survey will not be utilized for any purpose other than stated above.

This is a two part survey which should take approximately 30-45 minutes to complete. I would like to thank you for taking the time to assist in this survey.

Part I

For the following questions please circle the answer which best pertains to you or reflects your feelings.

1. What is your current rank?

a.	WO1	f.	2LT
b.	WO2	g.	1LT
c.	WO3	h.	CPT
d.	WO4	i.	MAJ
e.	WO5	j.	LTC

2. What was your status when you attended Army Flight School?

a. Active Duty
b. Army Reserve
c. National Guard

3. How many years have you been a rated Army aviator?

a. Less than 4
b. 4 to 6
c. 7 to 10
d. 11 to 15
e. 16 to 20
f. Over 20

4. Have you ever served as a pilot (Army) on active duty?

a. Yes
b. No

If you answered no to question #4, please go to question #6.

5. How long were you on active duty?

a. Less than 4 years
b. 4 to 6 years
c. 7 to 10 years
d. 11 to 15 years
e. 16 to 18 years

6. Have you ever served as an Army aviator in combat?

a. Yes
b. No

7. Do you fly aircraft in your civilian job?

a. Yes
b. No

8. If you had your choice, which civilian job would you prefer?

a. A civilian job which would allow me to pilot aircraft.

b. A civilian job which would not require me to pilot aircraft.

9. Have you ever applied for a civilian pilots position?

a. Yes
b. No

If you answered no to question #9, please go to question #12.

10. How far would you be willing to relocate to obtain a pilot position?

a. Local area only
b. Within a 5 mile radius
c. Statewide
d. Anywhere in the U.S.
e. World wide

11. Why in your opinion were you not hired to fill a pilot position?

a. No positions available
b. I was overqualified
c. I was underqualified
d. I refused the position

12. How would you rate the availability of helicopter positions in the civilian sector?

a. Excellent (many positions available).
b. Good (opportunities available if you seek them).
c. Average (if you look hard and market yourself well you can find a position).
d. Poor (very hard to find a position, few vacancies available).
e. Bad (there are few positions and no vacancies).

Part II

This portion of the survey is short answer and select the best answer. Please answer all questions to the best of your ability. If a question does not pertain to you simply write NA in the space provided. If you have any additional comments that will not fit in the space provided, please continue on the back of the questionnaire.

1. Why did you become an Army pilot?

2. Why did you leave active duty?

3. Why did you joint the reserve unit you are currently a member of?

4. Did flight pay have an impact on you becoming a pilot?

5. Did flight pay have an impact on your joining your current reserve unit?

   a. Yes
   b. No

6. If you could come in on active duty as a pilot right now, would you?

   a. Yes
   b. No

7. Would you come back on active duty if there was no flight pay?

   a. Yes
   b. No

8. Would you fly if there was no flight pay?

   a. Yes
   b. No

9. Why do Army aviators receive flight pay?

10. What is the number one requirement for an individual wishing to become a pilot?

11. When you become an Army aviator did you think there would be opportunities for you to pilot aircraft in the civilian sector?

a. Yes
b. No

12. What do you believe Army pilots chances of finding a civilian job as a pilot upon leaving active duty?

a. Everyone can get a position.
b. A majority will find a position.
c. About 1/2 will find a position.
d. Few will be able to find a position.
e. There are no positions available.

13. Why do Air Force pilots have an easier time finding flight positions than Army pilots?

14. How can an Army pilot increase his or her chances of obtaining a civilian pilot position upon leaving active duty?

15. Do you plan on staying in your current reserve unit as a pilot until you are eligible for retirement?

a. Yes
b. No

16. Is there a shortage of qualified pilots in your current unit?

a. Yes
b. No

17. Where did you first hear about the Army aviation program?

a. Yes
b. No

18. Do you think that the Army has a problem retaining qualified pilots?

a. Yes
b. No

19. Would you recommend Army aviation to a friend or to your son or daughter?

20. If you could change one aspect of Army aviation, what recommendation would you make?

APPENDIX B

ARMY PILOT QUESTIONNAIRE
RESULTS OF SURVEY

Results of survey, located at Appendix A are as follows: A total of 41 pilots responded to the survey. All results are as indicated below:

Part I

For the following questions please circle the answer which best pertains to you or reflects your feelings.

1. What is your current rank?

a.	WO1 - 0	f.	2LT - 0
b.	WO2 - 4	g.	1LT - 4
c.	WO3 - 10	h.	CPT - 17
d.	WO4 - 4	i.	MAJ - 2
e.	WO5 - 0	j.	LTC - 0

2. What was your status when you attended Army Flight School?

a.	Active Duty	- 38
b.	Army Reserve	- 1
c.	National Guard	- 2

3. How many years have you been a rated Army aviator?

a.	Less than 4	- 6
b.	4 to 6	- 9
c.	7 to 10	- 7
d.	11 to 15	- 5
e.	16 to 20	- 7
f.	Over 20	- 1

4. Have you ever served as a pilot (Army) on active duty?

a. Yes - 37
b. No - 4

If you answered no to question #4, please go to question #6.

5. How long were you on active duty?

a. Less than 4 years - 0
b. 4 to 6 years - 2
c. 7 to 10 years - 33
d. 11 to 15 years - 2
e. 16 to 18 years - 0

6. Have you ever served as an Army aviator in combat?

a. Yes - 17
b. No - 24

7. Do you fly aircraft in your civilian job?

a. Yes - 5
b. No - 36

8. If you had your choice, which civilian job would you prefer?

a. A civilian job which would allow me to pilot aircraft. - 39

b. A civilian job which would not require me to pilot aircraft. - 2

9. Have you ever applied for a civilian pilots position?

a. Yes - 33
b. No - 8

If you answered no to question #9, please go to question #12.

10. How far would you be willing to relocate to obtain a pilot position?

a.	Local area only	- 0
b.	Within a 5 mile radius	- 0
c.	Statewide	- 3
d.	Anywhere in the U.S.	- 20
e.	World wide	- 10

11. Why in your opinion were you not hired to fill a pilot position?

a.	No positions available	- 30
b.	I was overqualified	- 0
c.	I was underqualified	- 2
d.	I refused the position.	- 1

12. How would you rate the availability of helicopter positions in the civilian sector?

a.	Excellent (many positions available)	- 4
b.	Good (opportunities available if you seek them)	- 4
c.	Average (if you look hard and market yourself well you can find a position)	- 3
d.	Poor (very hard to find a position, few vacancies available)	- 9
e.	Bad (there are few positions and no vacancies)	- 29

Part II

This portion of the survey is short answer and select the best answer. Please answer all questions to the best of your ability. If a question does not pertain to you simply write NA in the space provided. If you have any additional comments that will not fit in the space provided, please continue on the back of the questionnaire.

1. Why did you become an Army pilot?

Top 3 responses:
1. To fly helicopters. - 20
2. To become a pilot. - 11
3. To become an officer. - 5

2. Why did you leave active duty?

Top 3 responses:
1. Job dissatisfaction. - 10
2. Family problems. - 8
3. Army forced me out. - 7

3. Why did you joint the reserve unit you are currently a member of?

Top 3 responses:
1. To fly helicopters. - 22
2. To continue military career. - 8
3. For extra spending money. - 5

4. Did flight pay have an impact on you becoming a pilot?

a. Yes - 9
b. No - 32

5. Did flight pay have an impact on your joining your current reserve unit?

a. Yes - 2
b. No - 39

6. If you could come in on active duty as a pilot <u>right now</u>, would you?

a. Yes - 31
b. No - 10

7. Would you come back on active duty if there was no flight pay?

a. Yes - 31
b. No - 10

Note: Same respondents that selected yes and no for question number 6 selected the same response in question number 7.

8. Would you fly if there was no flight pay?

a. Yes - 40
b. No - 1

9. Why do Army aviators receive flight pay?

Top 3 responses:
1. For hazardous duty. - 10
2. Because flight requires special skills. - 7
3. Because training is so expensive. - 5

10. What is the number one requirement for an individual wishing to become a pilot?

Top 3 Responses:
1. Desire to fly. - 22
2. Meet the physical requirements. - 5
3. Be in good shape. - 5

11. When you become an Army aviator did you think there would be opportunities for you to pilot aircraft in the civilian sector?

a. Yes - 32
b. No - 9

12. What do you believe Army pilots chances of finding a civilian job as a pilot upon leaving active duty?

a. Everyone can get a position. 100% - 0
b. A majority will find a position. 75% - 0
c. About 1/2 will find a position. 50% - 3
d. Few will be able to find a position. 25% - 36
e. There are no positions available. 0% - 2

13. Why do Air Force pilots have an easier time finding flight positions than Army pilots?

Top 3 responses:
1. A lot more opportunities exist. - 15
2. The airlines need them. - 10
3. The Air Force helps them to find positions. - 7

14. How can an Army pilot increase his or her chances of obtaining a civilian pilot position upon leaving active duty?

Top 3 responses:
1. Become qualified on fixed wing aircraft. - 10
2. Obtain an advanced degree in some areas of aviation. - 7
3. Study navigational skills, and build a resume. - 6

15. Do you plan on staying in your current reserve unit as a pilot until you are eligible for retirement?

a. Yes - 31
b. No - 9

16. Is there a shortage of qualified pilots in your current unit?

a. Yes - 1
b. No - 40

17. Where did you first hear about the Army aviation program?

Top 3 responses:

1. A friend. - 10
2. An Army recruiter. - 7
3. Another pilot. - 6

18. Do you think that the Army has a problem retaining qualified pilots?

a. Yes - 8
b. No - 33

19. Would you recommend Army aviation to a friend or to your son or daughter?

a. Yes - 35
b. No - 6

20. If you could change one aspect of Army aviation, what recommendation would you make?

Top 3 responses:

1. More flying time and duties. - 19
2. Less additional duties. - 12
3. Less bullshit. - 5

BIBLIOGRAPHY

Government Documents

Bureau of Labor and Statistics, Occupational Outlook Handbook 1992-1993 Edition. Washington, DC: US Government Printing Office, May 1992.

Department of the Air Force, The Air Issues Book. Washington, DC: U.S. Government Printing Office, August 1989.

Department of the Army, Army Regulation 37-104-3 Military Pay and Allowances, Procedures, Joint Uniform Military Pay Systems. Washington, DC: U.S. Government Printing Office, 31 August 1990.

Department of the Army, Regulation 611-1. Military Occupation Classification, Structure, Development, and Implementation. Washington, DC: U.S. Government Printing Office, 31 August 1992.

Department of the Army, Army Regulation 611-101, Commissioned Officer Classification and Assignments, Washington, DC: U.S. Government Printing Office, 31 May 1992.

Department of the Army, Army Regulation 611-112. Manual of Warrant Officer Military Occupational Specialties. Washington, DC: U.S. Government Printing Office, 31 August 1992.

Department of the Army, Army Regulation 611-201. Enlisted Career Management Fields, and Military Occupational Specialties. Washington, DC: U.S. Government Printing Office, 31 May 1992.

Department of the Army, Army Regulation 614-100. Officer Assignment Policies. Washington, DC: U.S. Government Printing Office, 1 September 1989.

Department of the Army, Army Regulation 614-200. Selection of Enlisted for Training Assignments. Washington, DC: U.S. Government Printing Office, 17 October 1990.

Department of the Army, DA Pam 60-11, Warrant Officer Professional Development. Washington, DC: U.S. Government Printing Office, 17 October 1992.

Department of the Army, Officer and Warrant Officer Aviation Guide and Information. Washington, DC: U.S. Army Aviation Branch, Government Printing Office, June 1992.

Department of the Army, Modified Table of Equipment, Joint Task Force JAGUAR (Provisional) 1992. Washington, DC: U.S. Government Printing Office, June 1992.

Department of the Army, Military Manpower Costs by Component, Table VIII. Washington, DC: U.S. Government, Office of the Secretary of Defense, June 1993.

Department of Defense, Military Manpower Recruiting Results for the Active Components. Washington, DC: U.S. Office of the Secretary of Defense, June 1993.

Department of Defense, DODPM Part Two, Manual of Pay and Entitlements, Washington, DC: Office of the Secretary of Defense, U.S. Government Printing Office, 1 January 1993.

Department of Defense, National Defense Authorization Act for Fiscal Years 1992 and 1993, Report No. 102-311, Conference Report to Accompany H.R. 2100, 102:1, Washington, DC: U.S. Government Printing Office, June 1993.

Department of Energy, Analysis of Military Occupational Specialities in the Army. Monterey, CA: Naval Post Graduate School, May 1992.

U.S. Congress House, Committee on Armed Services, Hearing on H.R. 0593, Relating to Incentive Pay, to Attract and Retain Volunteers for Aviation Duties. 93rd Congress, 1st Session, May 1974.

U.S. Congress House, Aviation Career Incentive Act of 1974. 93rd Congress, 1st Session, May 1974.

U.S. Congress House, Committee on Armed Services, Full Committee Consideration of Aviation Improvement Act of 1984. 96th Congress, 1st Session, May 1984.

Baker, Todd A., Scale Development for Enlisted Motivation Measures (Technical Report 901). Washington, D.C.: United States Army Research Institute for Behavioral and Social Sciences, 1 January 1990.

Unpublished Dissertations, Theses and Papers

Crum, David F. "Air Force Pilot Retention: A Look at 1996." Carlisle Barracks, PA: U.S. Army War College, April 1990.

Eitebery, M. J., and S. Mehay, "Shape of Things to Come, Army Recruiting and Manpower." Research Project Monterey, CA: Naval Post Graduate School, May 1992.

Goodwin, Willard C., Jr. "A Study of the Army Aviator Retention Problem." MMAS Theses, Fort Leavenworth, Kansas: U.S. Army Command and General Staff College, 1969.

Haniford, J. D., and B. M. Stone. "Effects of Flight Pay and Commitment on Pilot Applicants." A Study Project Carlisle Barracks, PA: Army War College, April 1991.

Hoope, B. J. "Pilot Retention, A Gray Issue." Maxwell Air Force Base, Air War College, March 1984.

Jaroch, V. D., and M. A. Williams. "Alternate Solutions to the Problem of Pilot Retention." Research Study Maxwell Air Force Base, AL: Air War College, June 1989.

Kochner, K. M., and G. W. Thomas. "Enlisted Loss Profiles." Army Monterey, CA: Naval Post Graduate School, 1990.

Latour, K. R. "Pilots in the 1990's, A Concern?" Research Project Maxwell Air Force Base, AL: Air War College, March 1984.

Mestemaker, M. J. "Aviation Career Improvement Act, and Its Impact on Retention." Research Study Carlisle Barracks, PA: Army War College, April 1992.

Owen, Ed. "Flight Pay, Gates, and Wings." A Study Project, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas: December 1993.

Rhoades, J. D. Pilot Retention: "An Historical Analysis." A Research Project Maxwell Air Force Base, AL: Air War College, June 1989.

Smith, Marvin M. "Alternative Compensation Plans for Improving Retention: Tool, or Waste of Money?" A Research Project (Prepared for the House Armed Services Committee on Military Personnel and Compensation), Washington, DC: U.S. Government Printing Office, May 1990.

Webber, J. A. Navy's Aviation Retention Bonus: Retention Tool or Waste of Money? Maxwell Air Force Base, AL: Air War College, February 1987.

Woods, W. A. Analysis of Enlisted Incentives for High Quality Recruits to the United States Army. Monterey, CA: Naval Post Graduate School, September 1992.

Books

Babbie, Earl, R., Social Research for Consumers. Belmont, California: Wadsworth Publishing Company, 1989.

Cardoza, Anne and J. Suzee. The Aerospace Careers Handbook, New York, Simon and Schuster, (Reference Division), 1991.

Goode, William J., and Paul Hatt, Methods in Social Research. New York McGraw Hill Book Co., 1969.

Krautz, Les. The Jobs Rated Almanac. New York, World Almanac, 1992.

McFarland, Steven L., and W. Newton, To Command the Sky. Washington and London: Smithsonian International Press, 1991.

Michigan State University: Career Development and Placement Services 1992-1993: A Study of Businesses, Industries and Governmental Agencies Employing New College Graduates. Lansing, MI: Michigan State University Press, December 1990.

Monayer, William W. Air Power in Three Wars (WWII, Korea, and Vietnam). Washington, DC: U.S. Government Printing Office, 1978.

Nakfour, Edward F., and A. Charity. Job Hunters SourceBook, (Where to Find Employment, Leads, and Other Job Search Resources. Detroit, MI: Gale Research Inc., 1992.

Parten, Mildred. Surveys, Polls, and Samples: Practical Procedures. New York: Cooper Square Publishers, Inc., 1986.

Taylor, John W. R., M. Taylor, and D. Monclay. The Guinnes Book of Air Facts and Feats. New York, Sterling Publishing Co., 1980.

Turabin, Kate L., A Manual for Writers (of Term Papers, Theses, and Dissertations). Chicago, IL: The University of Chicago Press, 5th Ed., 1987.

Periodicals and Articles

"Army to Lose More Helicopters in Bottom-Up Recommenda--tions," Aviation Week and Space Technology. (21 July 1993), 78-80.

Abowd, John F. and Charles Brown, "The Quality Dimension in Army Retention: A Comment." Carnegie-Rochester Conference Series on Public Policy. 33 (Autumn 1990).

Bond, David F., "Budget cuts Put Pressure on Army Aviators," Aviation Week and Space Technology. (July 1989).

Brown, Clifford L., "Warrant Officer Career Paths," Aviation Digest. September/October 1993.

Brown, David A., "Global Defense Cuts Impede Helicopter Development," Aviation Week and Space Technology. (September 1992).

Kutz, Sandy. "Fewer Hospitals Giving Helicopters a Whirl." Modern Healthcare (August 1992).

McKenna, James T. "Flight Departments Officer Higher Salaries to Attract Qualified Pilots," Aviation Week and Space Technology (October 1992).

Mitchel, William. "The Development and Possibilities of Modern Air Power." Winged Defense, 1992.

North, David M. "Airline Demand for Pilots Sputs Lowered Requirements." Aviation Week and Space Technology, April 1985.

Ott, James. "Senate Hearing Focuses on Growing Pilot Shortage," Aviation Week and Space Technology. August 1990.

Computer Information Services

Army Employer Network Database. Version 1.132, Army Career and Alumni Services, Fort Leavenworth, Kansas, March 1994.

Interstate Job Bank. Version Z.00E, January-February Source Date, 4 March 1994.

Job Opportunities Bulletin. Airline Employees Association, Chicago, IL: March 1994.

Nationwide Job Database. Federal and Civilian Job Opportunities, Code 19263038, (Helicopter Pilots) Washington, DC: March 1994.

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